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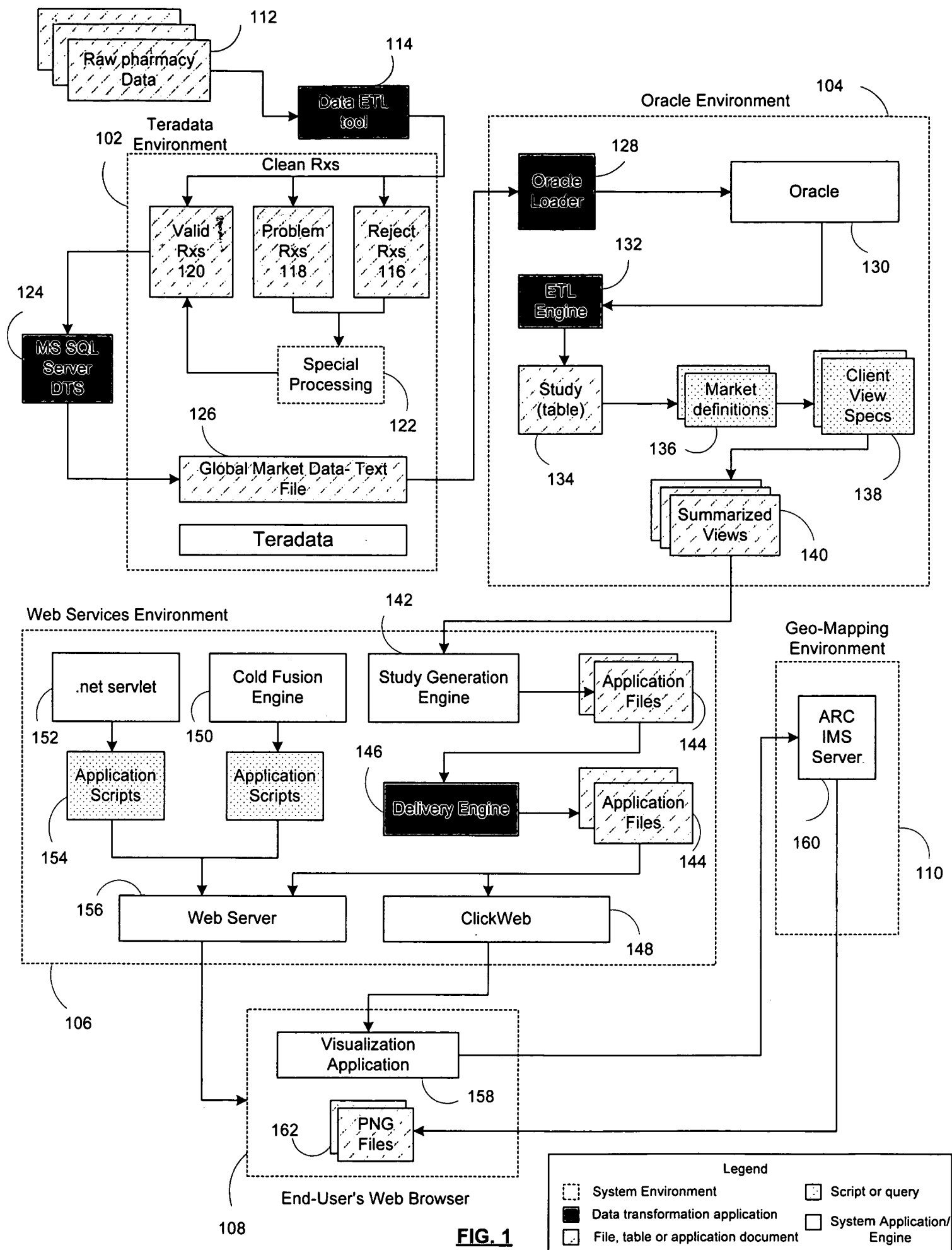


FIG. 1

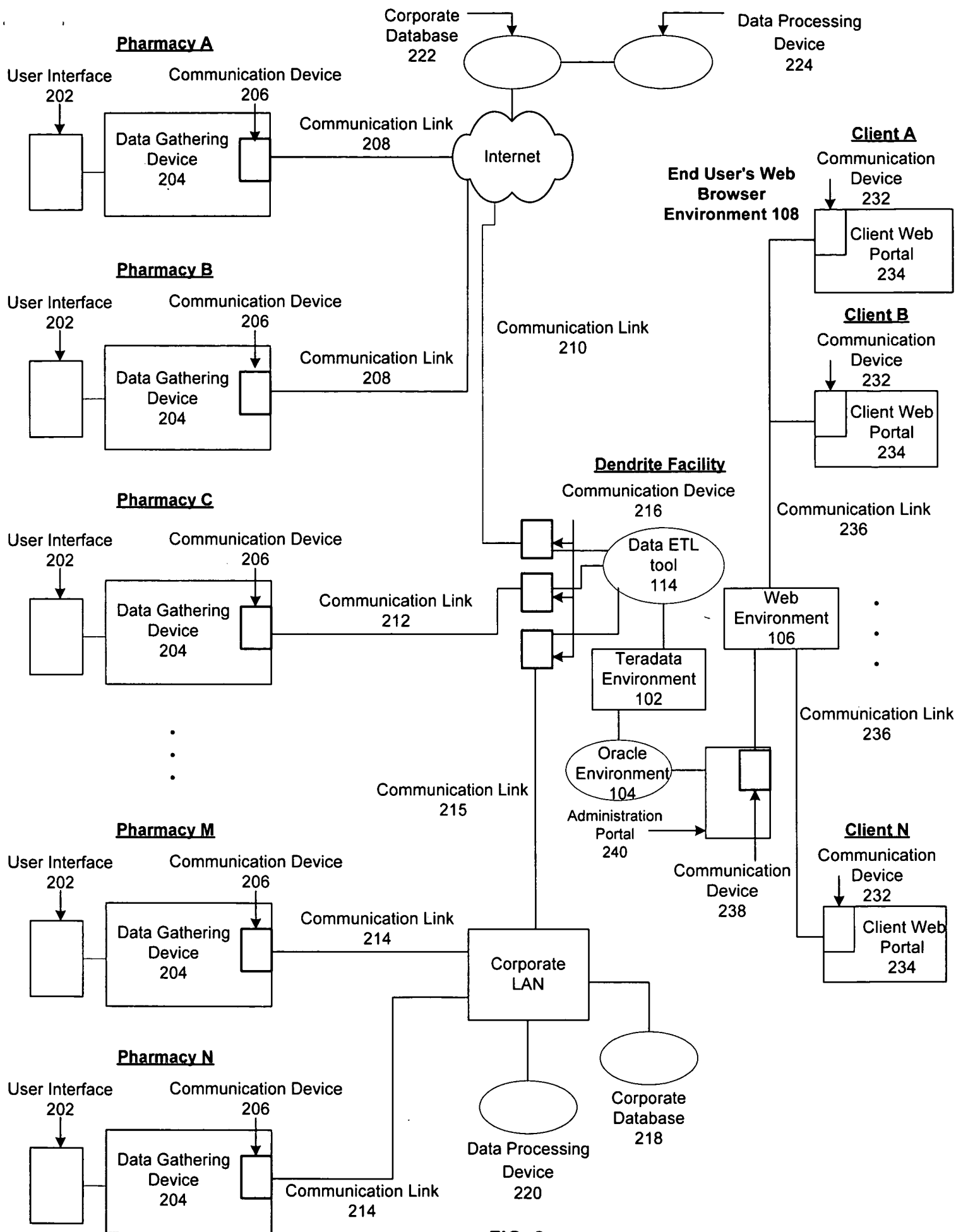


FIG. 2

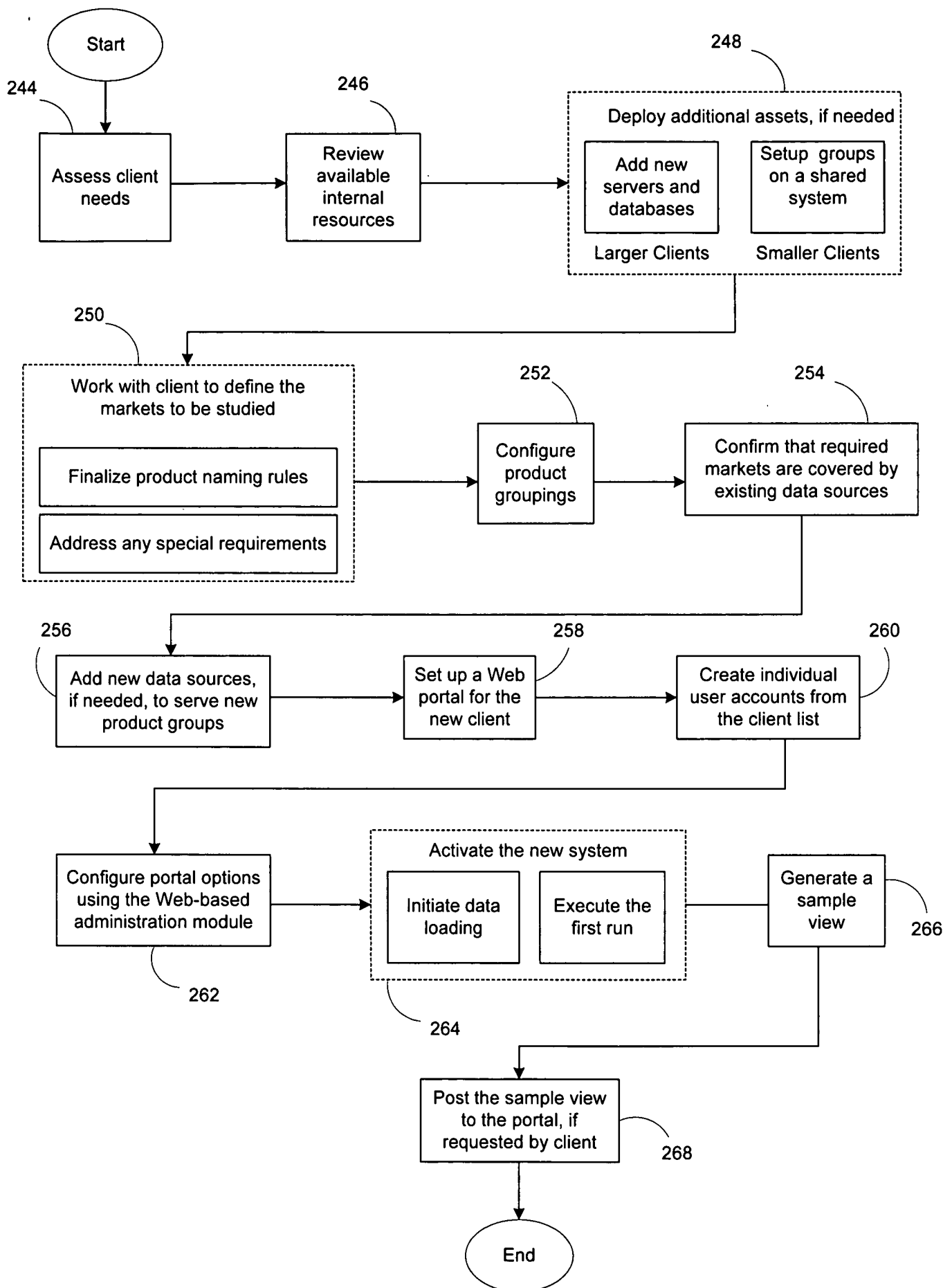


FIG. 2a

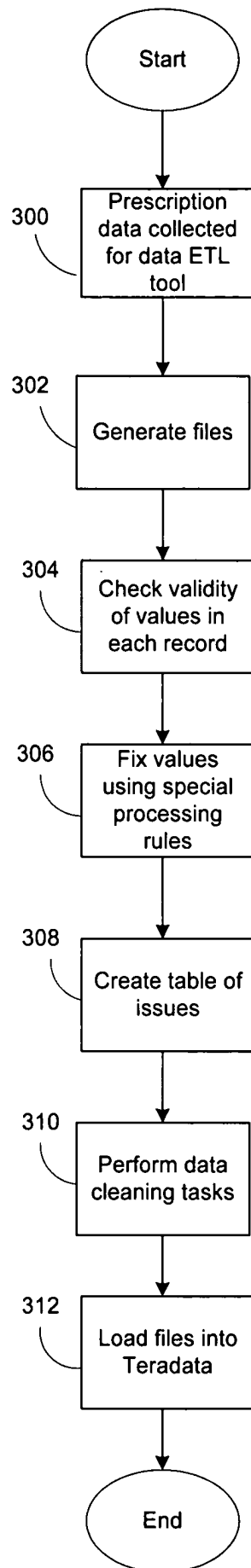


FIG. 3

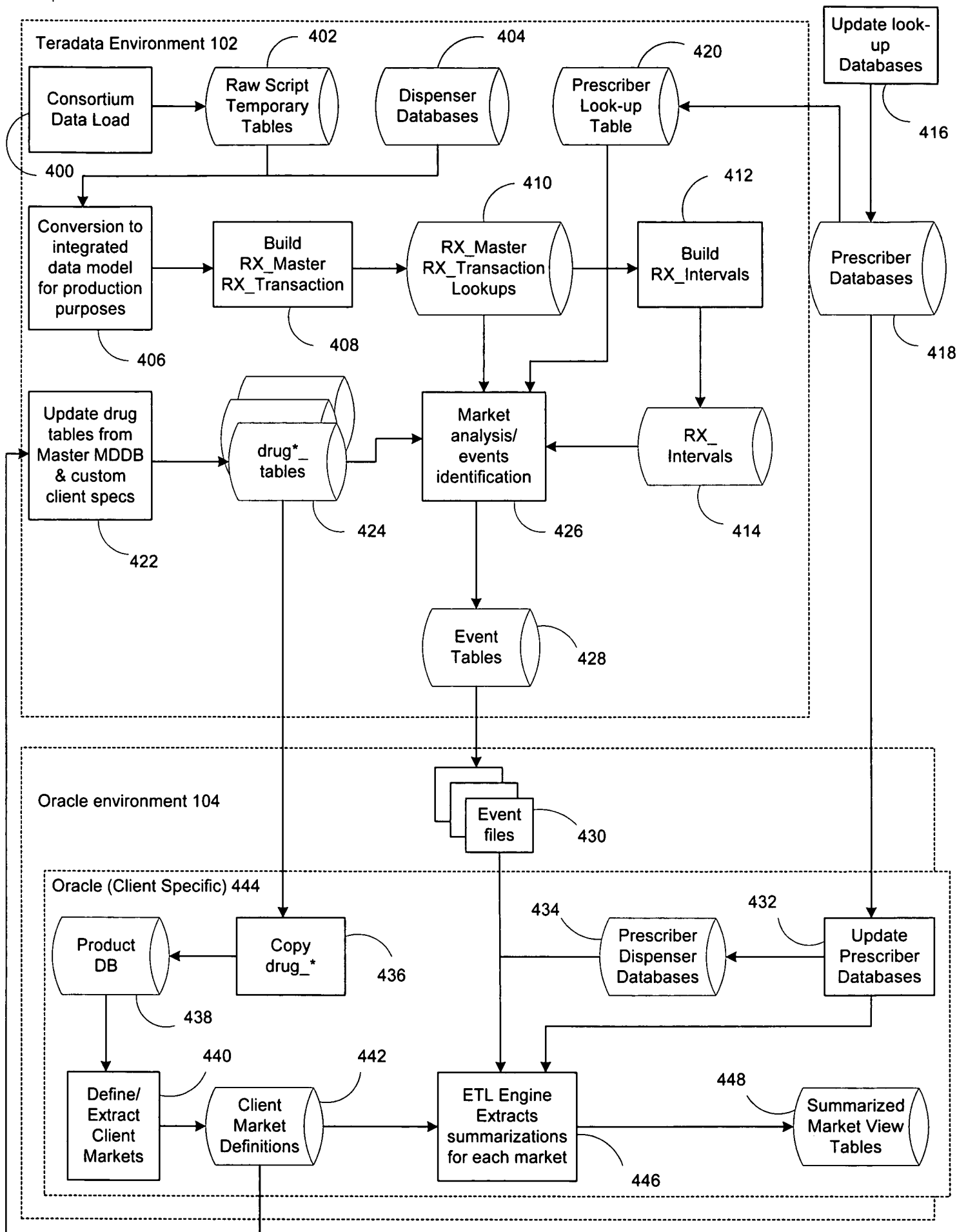


FIG. 4

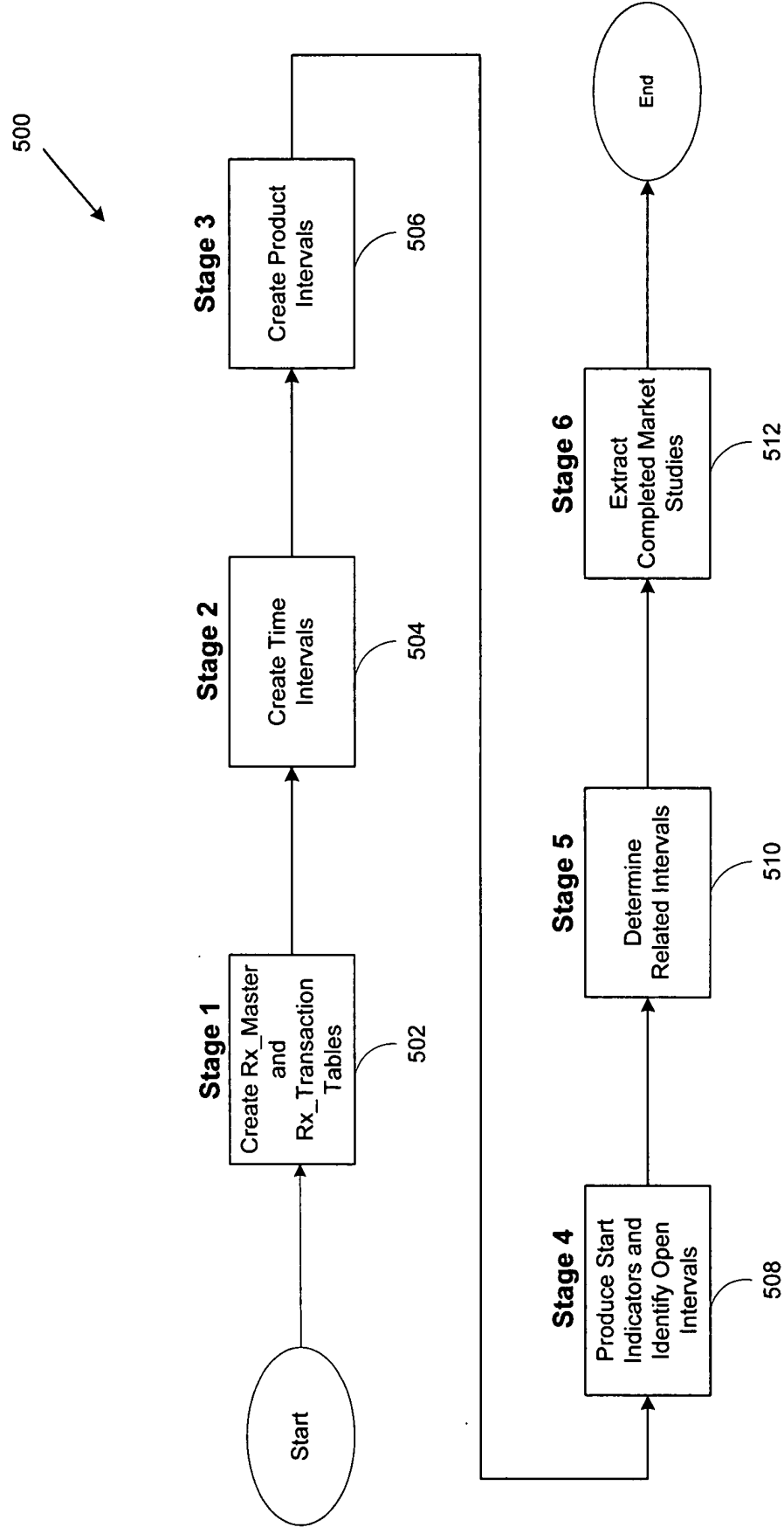


FIG. 5

RX_Master
rx_id
patient_id
dispenser_id
prescriber_id
dispensed_NDC9

514

RX_Transaction
rx_id
transaction_id
Dispensed_NDC_Pack
age_Code
refill_nbr
dispensed_date
dispensed_quantity
days_supply_dispensed
Payment_Type
DAW_Code

516

G_Atomic_Intervals
rx_id
group_code
dispensed_date
end_date
day_qty
refill_nbr
start_order

518

RX_Intervals
rx_id
start_date
end_date
last_refill_date
qty
start_refill_nbr
refill_count

520

Product_Intervals
patient_id
interval_id
prescriber_id
product_id
category_id
area_id
start_date
end_date
last_refill_date

522

Tmpg_MergedIntervals
patient_id
prescriber_id
ncdpd_nbr
product_id
category_id
area_id
start_date
end_date
last_refill_date
start_refill_nbr
start_indicator
interval_id
group_code

524

TEMP_Event_Intervals
patient_id
prescriber_id
product_id
category_id
area_id
start_date
end_date
last_refill_date
start_indicator
interval_id
flg_opened_interval

526

Related_Intervals
patient_id
interval_id
related_interval_id
relation_type

528

Event_Intervals
patient_id
prescriber_id
product_id
category_id
area_id
start_date
end_date
last_refill_date
start_indicator
interval_id
flg_opened_interval

530

FIG. 5a

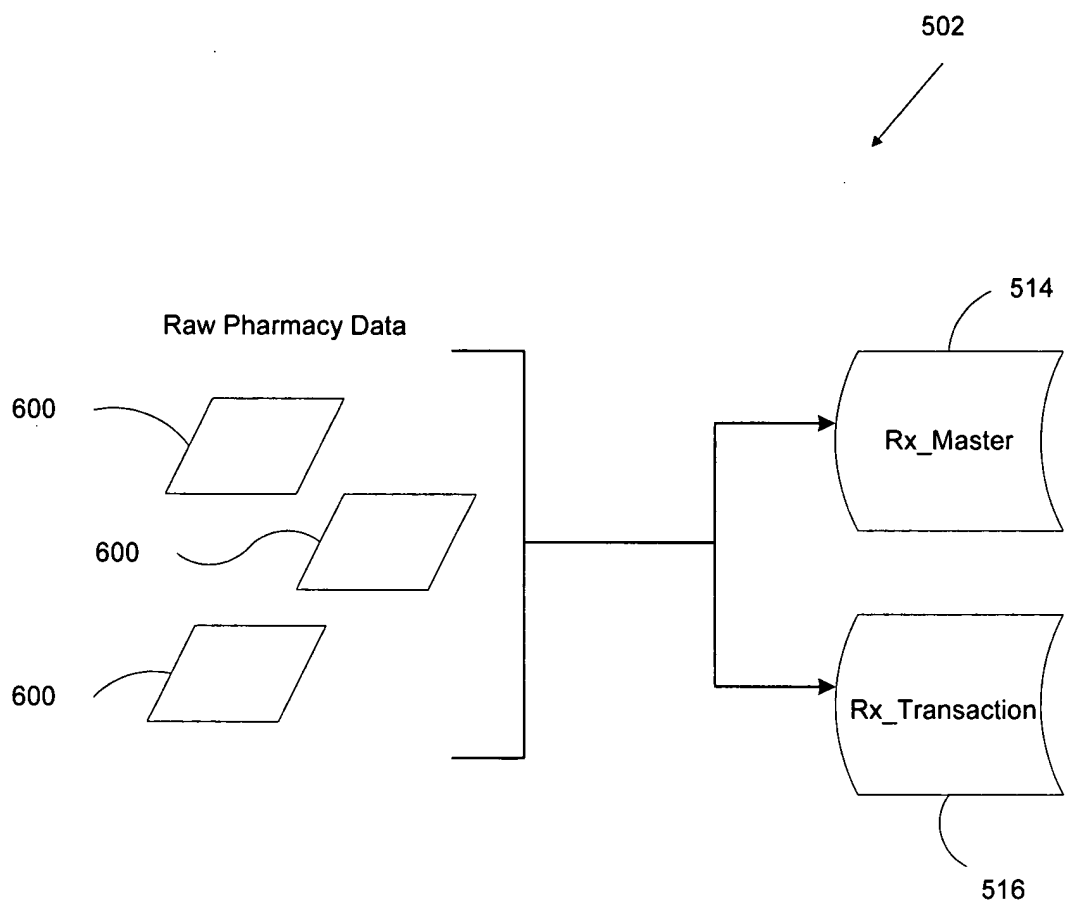


FIG. 6

RX_Master			
Column Name	Data Type	Null Option	Description
<i>rx_id</i>			Primary key. Keys this table to RX_Transaction.
<i>patient_id</i>			A unique identifier for the current anonymous patient. Details about the patient, including birth year and gender, are stored separately in a Patient table. The Patient table is keyed to this <i>Patient_ID</i> , as is the Patient Identifier used by the Dispenser for this patient.
<i>dispenser_id</i>			A unique identifier which indicates the pharmacy that dispensed the product to the patient. <i>Dispenser_ID</i> is used to link to the dispenser table contains details about the dispenser/pharmacy including address, chain affiliations, store affiliations and NCPDP number. Currently, the <i>Dispenser_ID</i> is the pharmacy's NCPDP number but this may be changed at some point because not all data providers supply NCPDP numbers.
<i>prescriber_id</i>			Identifies the prescribing physician. This is a sequentially generated identifier. The xRef_DEA table provides a look-up between the <i>prescriber_id</i> and the DEA number. In the future, another "xRef" table will provide a direct map between the <i>prescriber_id</i> and the Dendrite UMP database.
<i>dispensed_NDC9</i>			Identifies the product dispensed. The number is the first 9 digits of an 11-digit format National Drug Code (NDC code). The first 5 digits of this number identifies the manufacturer. The next 4 digits provide the manufacturer's product number. <i>Dispensed_NDC9</i> is stored as an integer, thus the leading 0's are implicit. Since the last 2 digits of an 11-digit NDC number just specify a given product's package code, we can safely assume that all prescriptions with the same first 9 digits are, in fact, the same product. Note: Any product with an NDC code which doesn't follow the NDC11 to NDC9 roll-up cannot be analyzed using ScripMaxIQ. This includes products like medical devices.

RX_Transaction			
Column Name	Data Type	Null Option	Description
<i>rx_id</i>	INTEGER	NOT NULL	Primary key. Keys this table to RX_Master.
<i>transaction_id</i>	DECIMAL(11,0)	NOT NULL	Uniquely identifies the current purchase transaction. Since prescription IDs aren't required for consortium data, this id is derived by combining the four elements which make up <i>rx_id</i> as well as <i>refill_no</i> and <i>dispensed_date</i> .
<i>Dispensed_NDC_Package_Code</i>	SMALLINT		Holds the last 2 digits that had been removed to create the <i>Dispensed_NDC9</i> number from the current prescription's 11-digit NDC Code.
<i>REFILL_NBR</i>	SMALLINT		This is the refill sequence number from the original prescription. The first full prescription has a refill number of 0.
<i>dispensed_date</i>	DATE FORMAT 'YYYY-MM-DD'	NOT NULL	Specifies the date that the current transaction occurred.
<i>dispensed_quantity</i>	DECIMAL(10,2) COMPRESS 30,00		Indicates the number of dosages (pills, capsules, etc.) that were dispensed.
<i>DAYS_SUPPLY_DISPENSED</i>	SMALLINT COMPRESS 30		Shows the number of days that this dispensed medication is scheduled to last, i.e., 60 pills @ 2 per day = 30 days. There are values for <i>days_supply_dispensed</i> which don't match the day supply but indicate other things. For example, a value of "98" or "99" indicates that a given product was dispensed on an "as needed" basis.
<i>Payment_Type</i>	VARCHAR(1) CHARACTER SET LATIN NOT CASESPECIFIC		Specifies the form of payment used to purchase this medication, i.e., cash, medical insurance or Medicare.
<i>DAW_Code</i>	VARCHAR(2) CHARACTER SET LATIN NOT CASESPECIFIC		Shows whether the dispenser provided the exact product specified on the prescription or a substitute.

FIG 6a

504

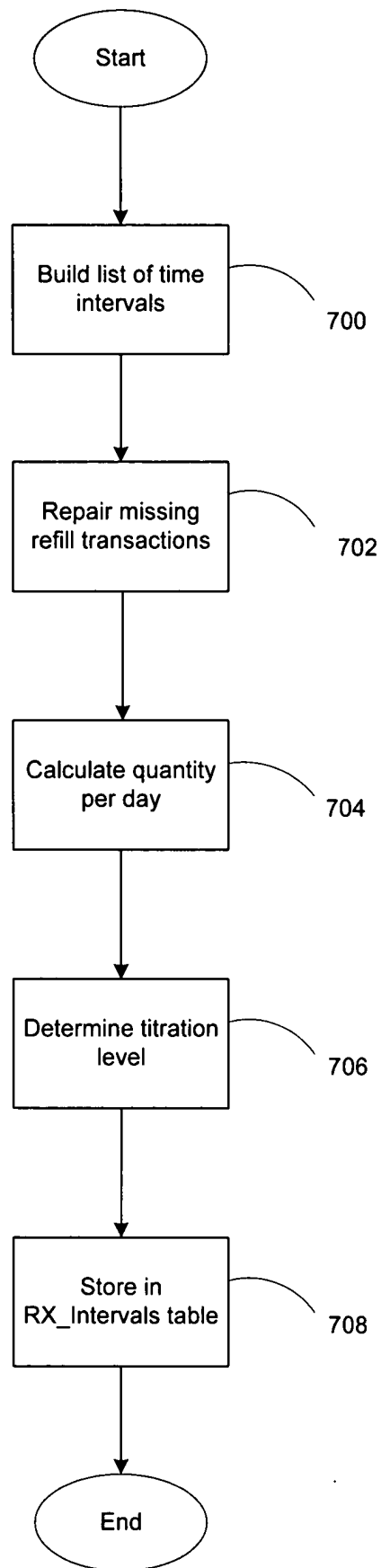



FIG. 7

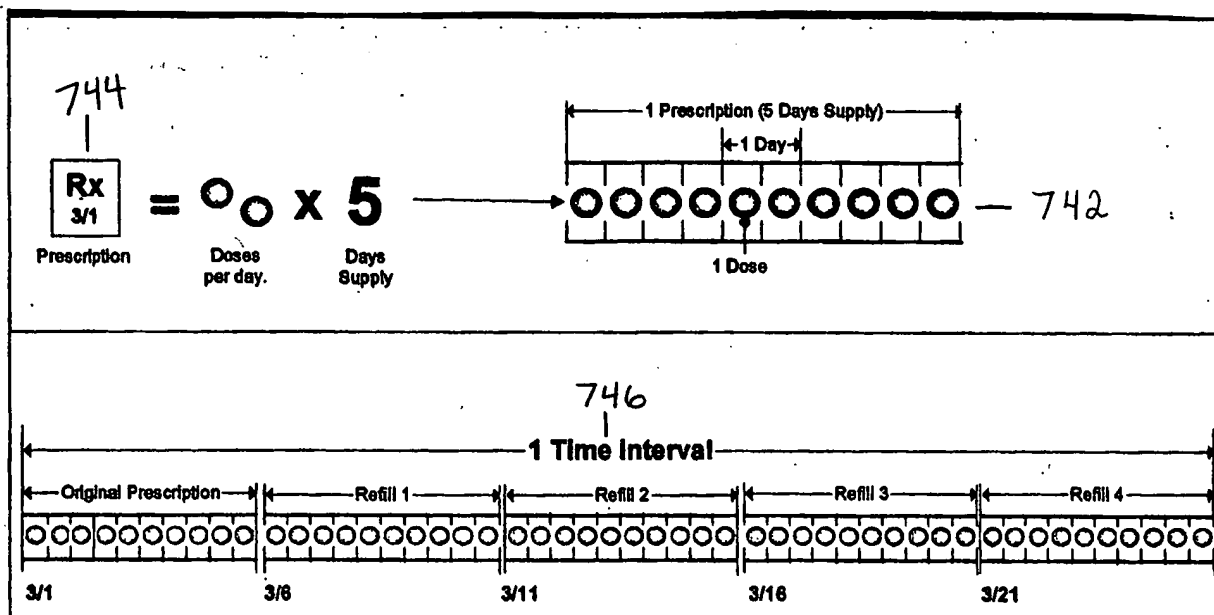
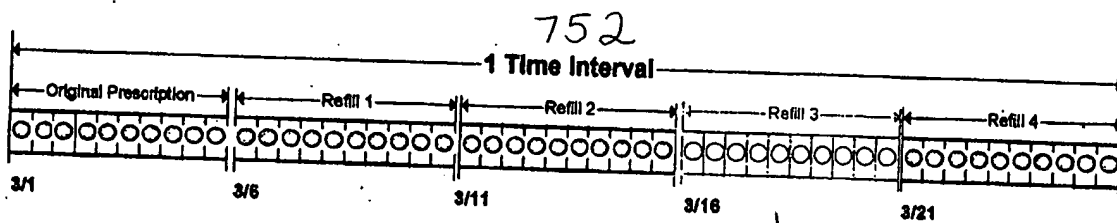


FIG. 7a



750

FIG. 7b

RX Interval			
Column Name	Data Type	Null Option	Description
<i>rx_id</i>			Primary Key.
<i>start_date</i>			Indicates the start of the current refill's treatment cycle. Calculated from the Rx purchase date.
<i>end_date</i>			Indicates the end of the current refill's treatment cycle. Calculated by adding the <i>days_supply</i> of the medication to its purchase date.
<i>last_refill_date</i>			<i>last_refill_date</i> is the last date within this interval that the patient physically refilled an Rx for the same product. The actual date the patient stopped taking the product will be sometime between this date and <i>end_date</i> , which is <i>last_refill_date</i> plus <i>days_supply</i> taken from the last refill (which could be different from the <i>days_supply</i> for all previous refills on a prescription).
<i>qty</i>			Refers to quantity per day of the medication. This is a fractional number.
<i>start_refill_nbr</i>			Stores the refill number of the earliest transaction in

FIG. 7c

710

Rx Transaction Table Entries

Rx_id 714	Transaction_Id	Dispensed ndc package code	Refill_no	Dispensed Date	Dispensed QTY	Days Supply	Payment Type	DAW
469,814,736	1,442,997,754	08	2	2000-01-28	60	30	T	0
469,814,736	787,315,098	08	3	2000-06-01	60	30	T	0
469,814,736	627,226,368	08	4	2000-07-03	30	15	T	0
469,814,736	469,814,736	08	0	2000-12-11	60	30	T	0
469,814,736	633,143,033	08	1	2001-01-30	60	30	T	0

712

Corresponding RX Interval Records

Rx_id 714	Start_date	End_date	Last_refill_date	Qty	Refill_count	Start_refill_nbr
469,814,736	2000-01-28	2000-07-18	2000-07-03	2.00		
469,814,736	2000-12-11	2001-02-30	2001-01-30	2.00		

FIG. 7d

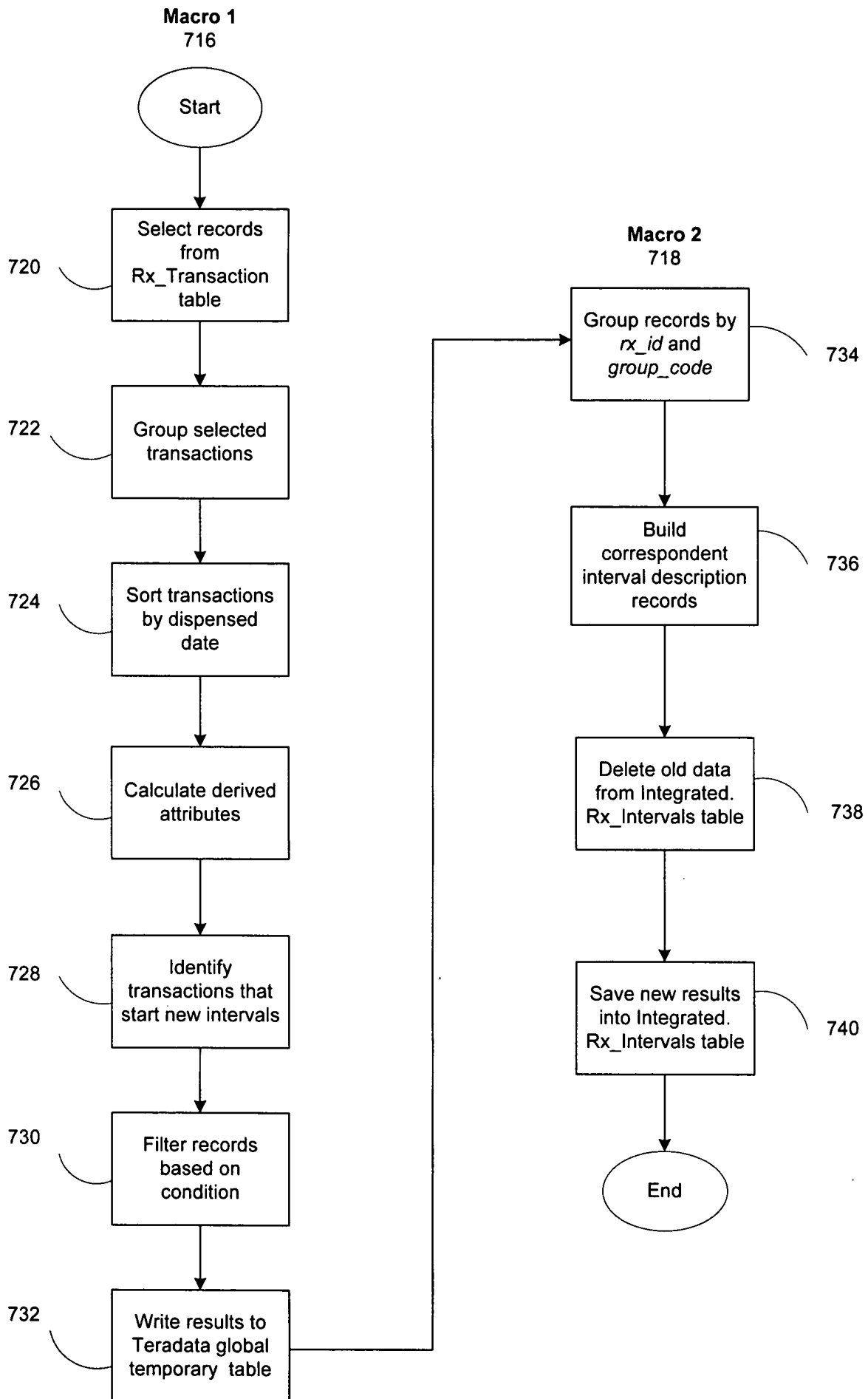


FIG. 7e

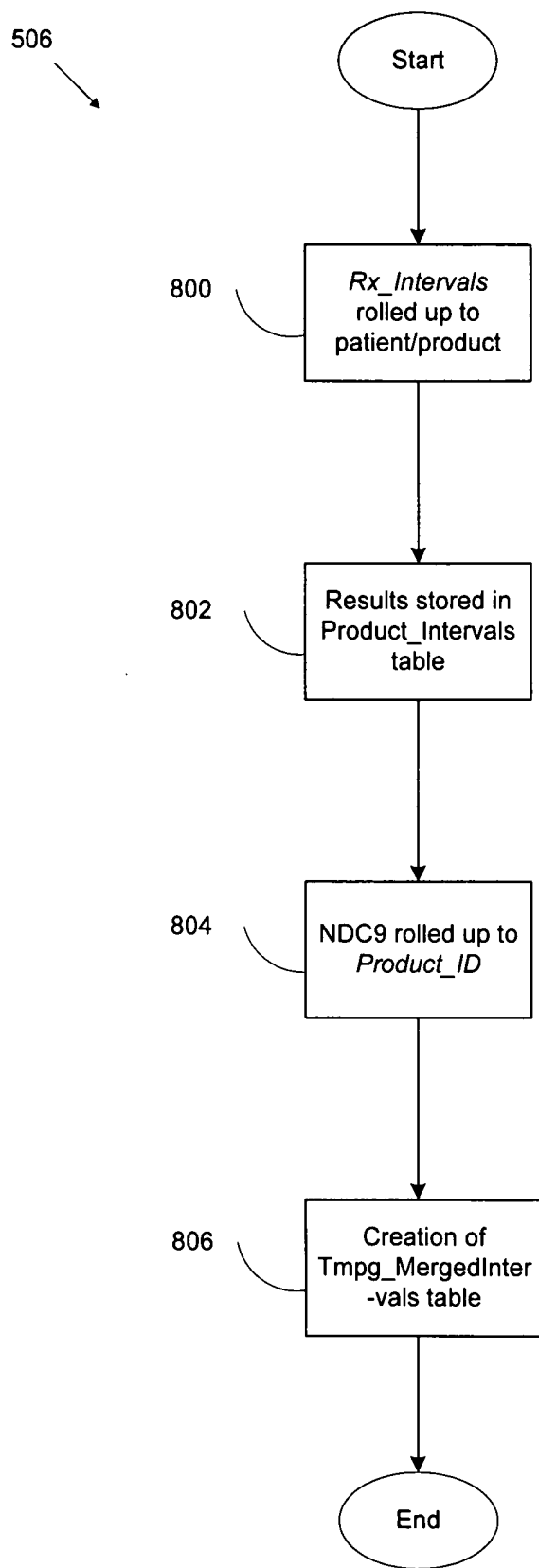


Fig. 8

Product_Intervals			
Column Name	Data Type	Null Option	Description
<i>patient_id</i>			<i>patient_id</i> and <i>interval_id</i> are combined to create the primary key. <i>interval_id</i> is a small int and restarts for each patient.
<i>interval_id</i>		Small int	
<i>prescriber_id</i>			Identifies the prescribing physician. This is a sequentially generated identifier. The xRef_DEA table provides a look-up between the <i>prescriber_id</i> and the DEA number. In the future, another "xRef" table will provide a direct map between the <i>prescriber_id</i> and the Dendrite UMP database.
<i>product_id</i>			Corresponds to a combination of a unique product trade name and classification from NDDb. Every unique combination is given a product ID. Product IDs can also be custom-defined. Custom-defined product have negative product IDs.
<i>category_id</i>			<i>Category_ID</i> is the Therapeutic Category that this product belongs to. This is a narrow grouping of products. Products within the same Therapeutic Category are considered generally equivalent to one another, in other words they compete amongst each other. The <i>Category_ID</i> corresponds to the <i>class_id</i> part of a product's Generic Product Identifier (GPI) in the MDDb Database. Classes can also be custom-defined.
<i>area_id</i>			Identifies the Therapeutic Area that this product belongs to. This is a broad grouping of comparable products. That's to say, products between which switch events are possible. If two products are not in the same Therapeutic Area, then they aren't considered switch candidates.
<i>start_date</i>			Indicates the start of the current refill's treatment cycle. Calculated from the Rx purchase date.
<i>end_date</i>			Indicates the end of the current refill's treatment cycle. Calculated by adding the <i>days_supply</i> of the medication to <i>start_date</i> .

FIG. 8a

508

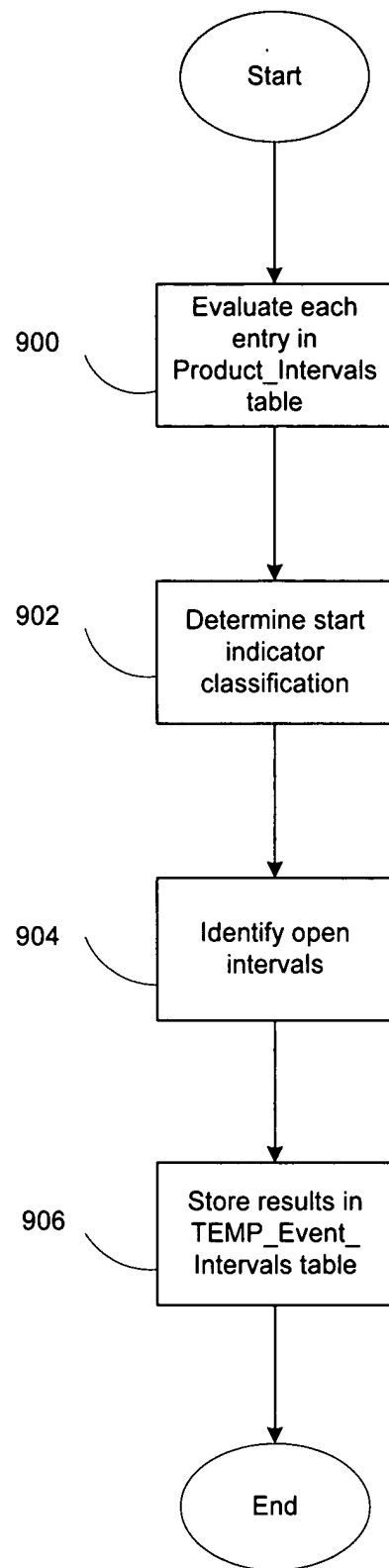


FIG. 9

Value	Name	Description
T	Area Start	First time the patient has taken any product in this therapeutic area
M	Category Start	First time the patient has taken any product in this therapeutic category
B	Product Start	First time the patient has taken this product
R	Restart	The patient is taking this product after not taking this product anytime in the previous 90 days
X	Intermittent	None of the above conditions met. Indicates intermittent use

FIG. 9a

510

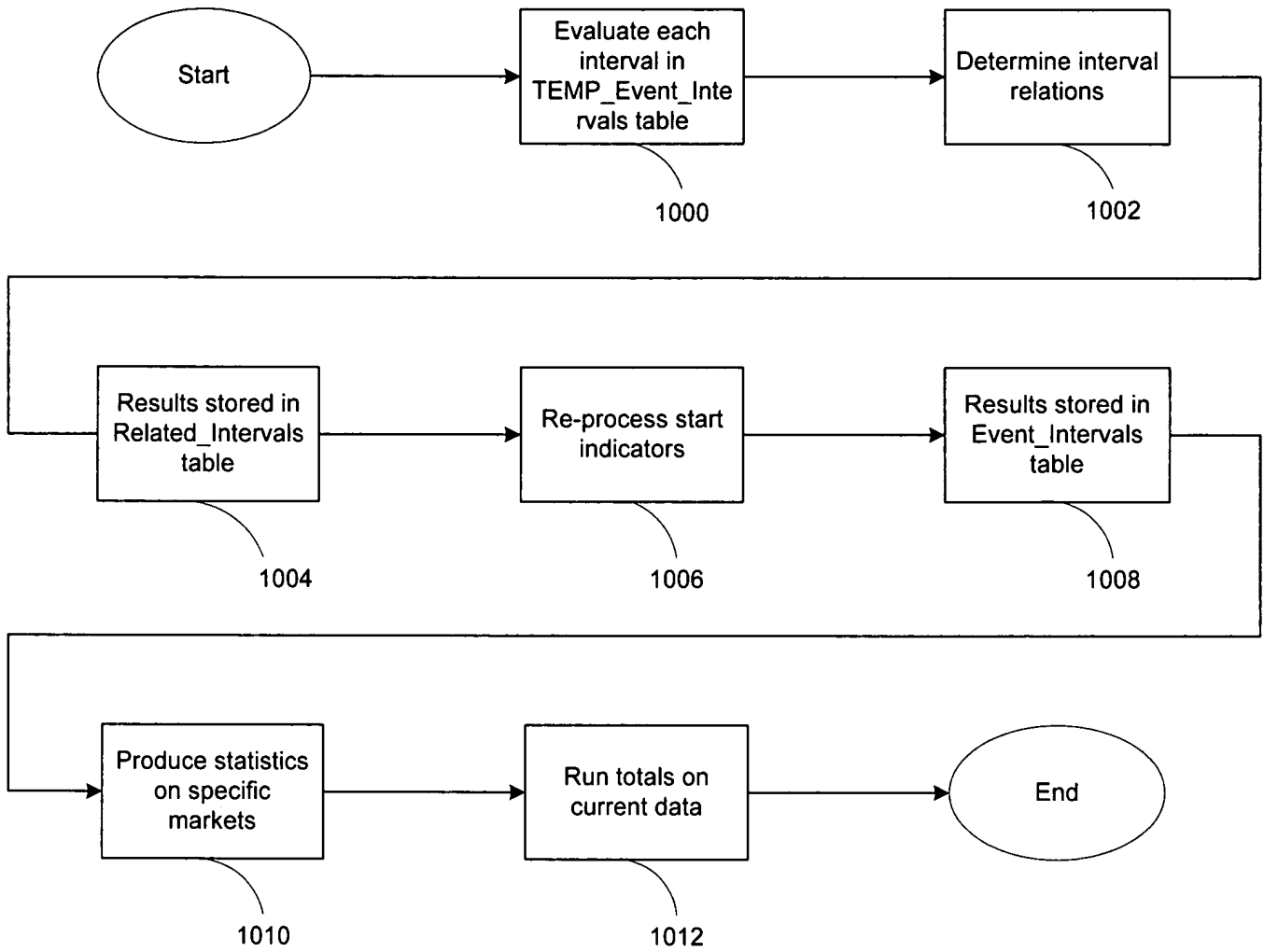


FIG. 10

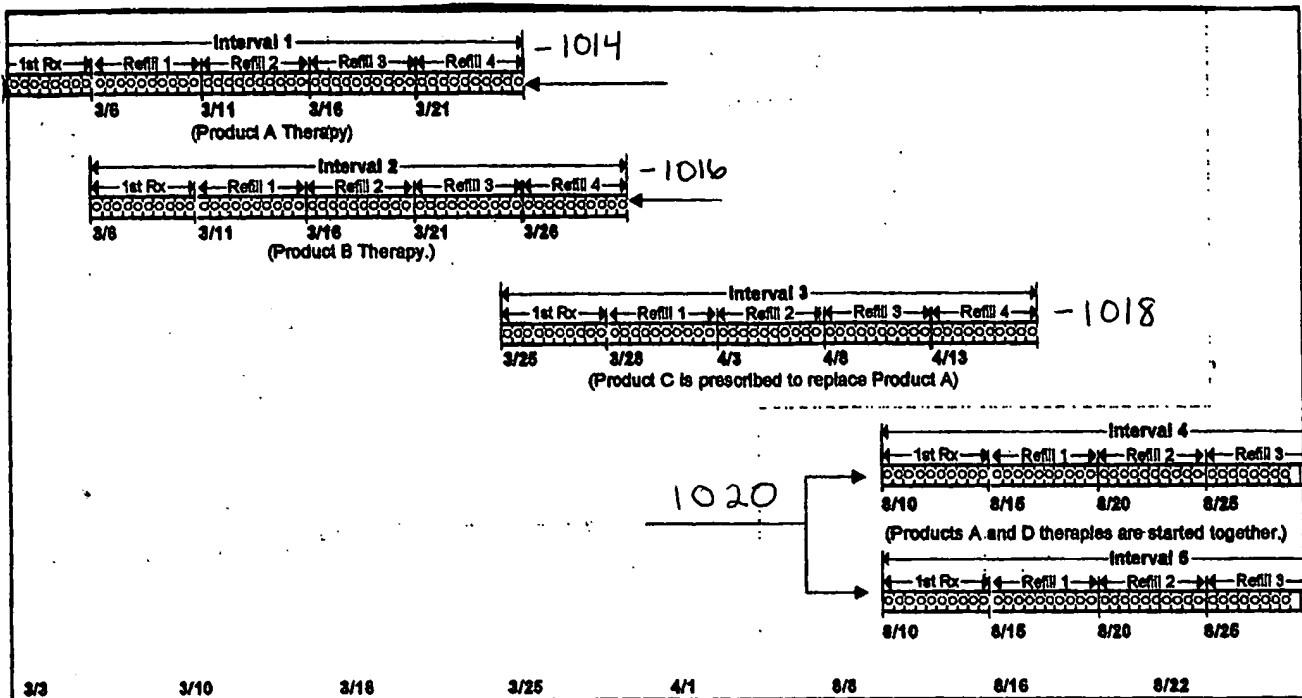
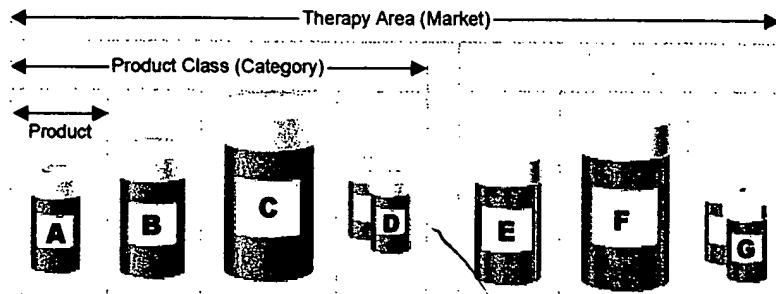


FIG. 10a

1030



1032

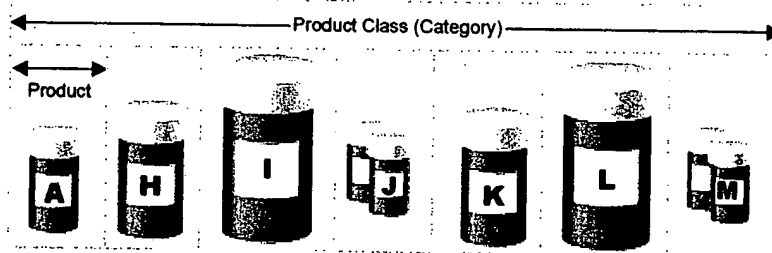
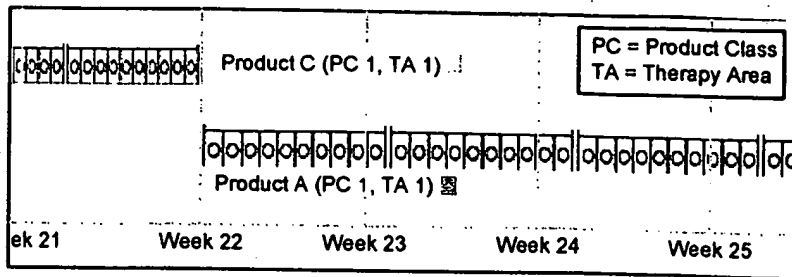
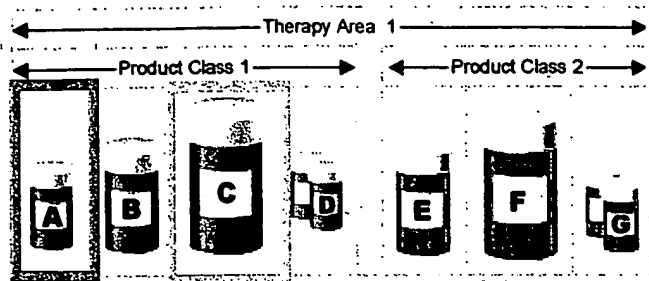
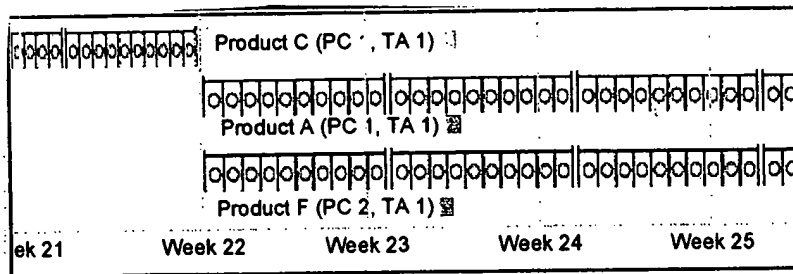
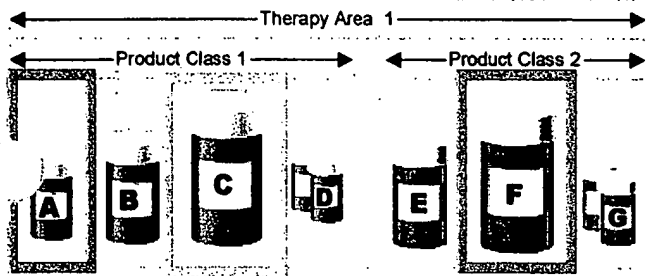


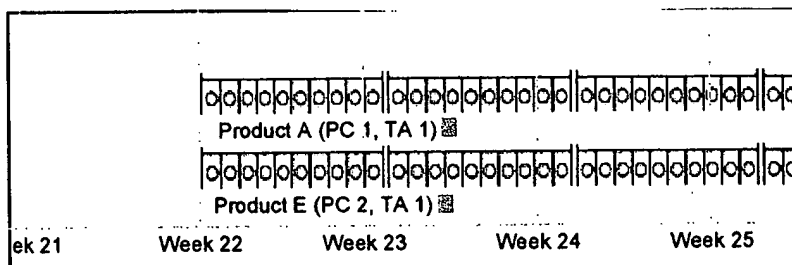
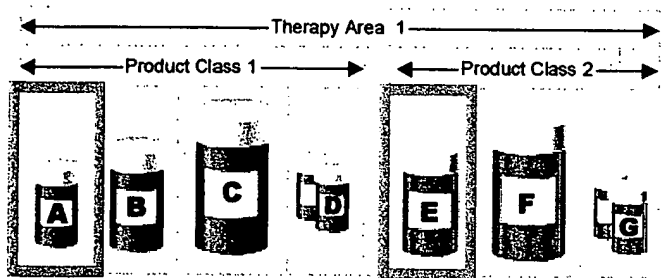
FIG. 10b



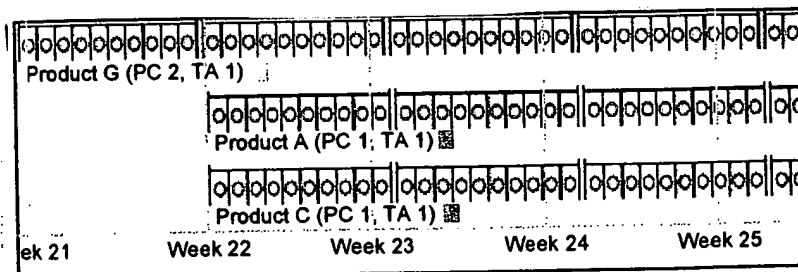
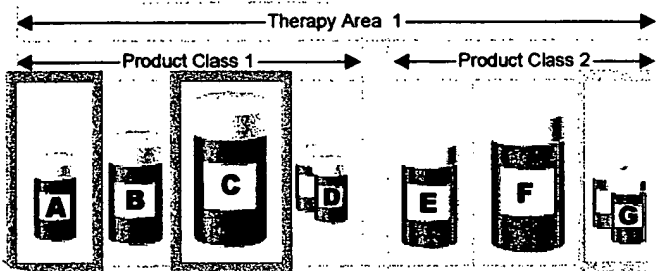
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1036

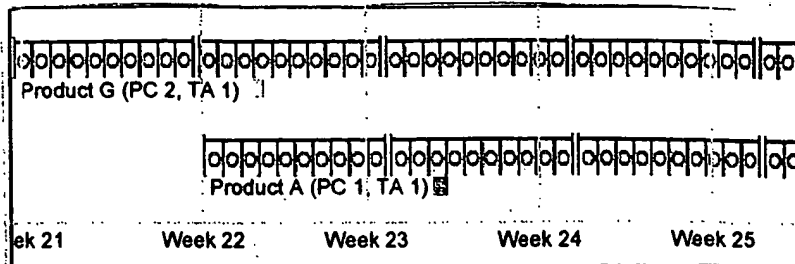
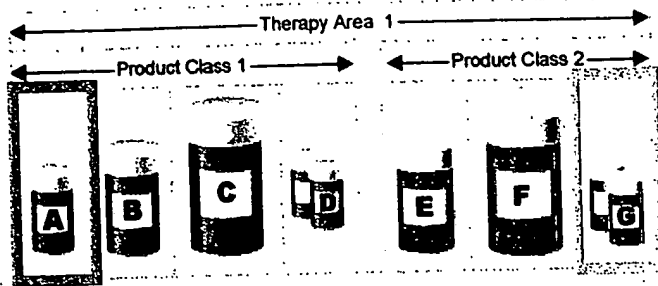


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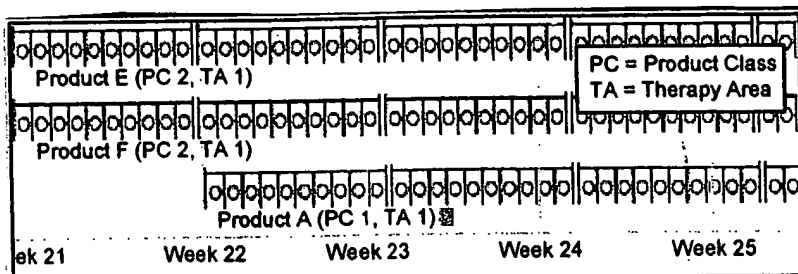
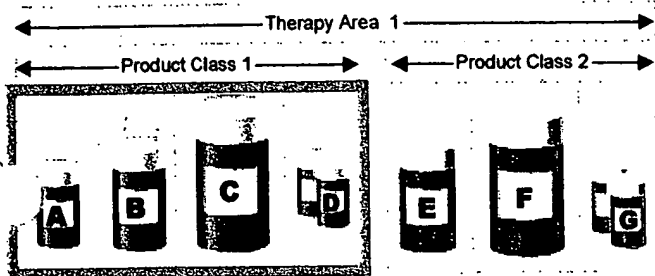


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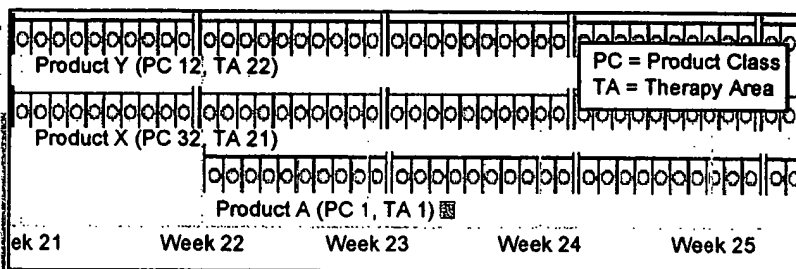
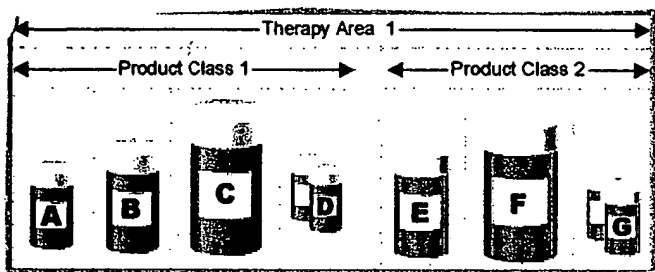
FIG. 10c



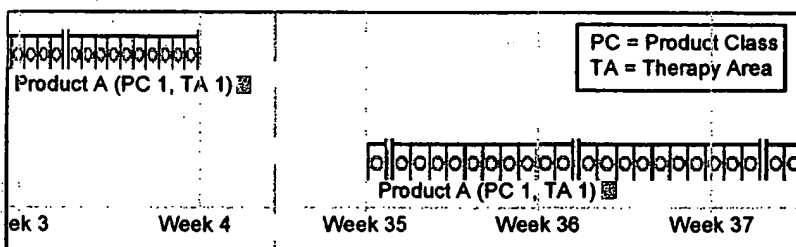
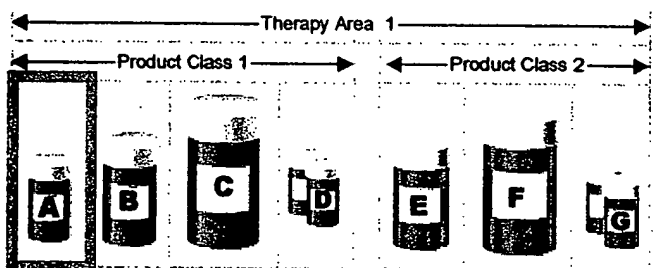
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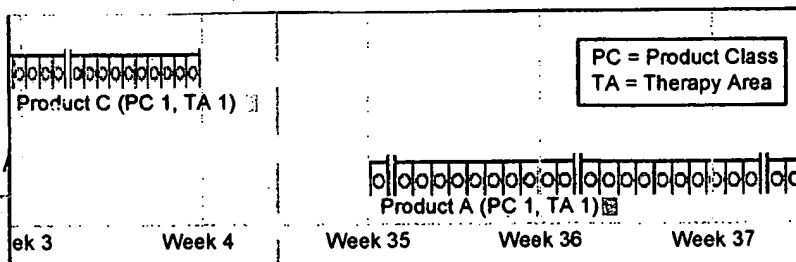
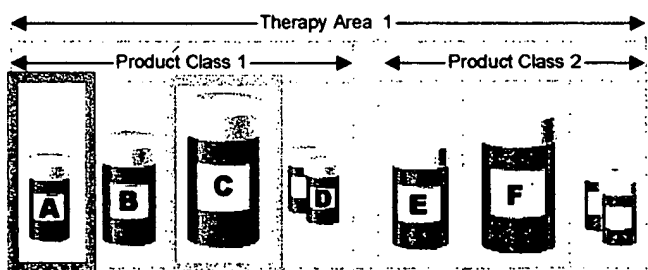
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1046

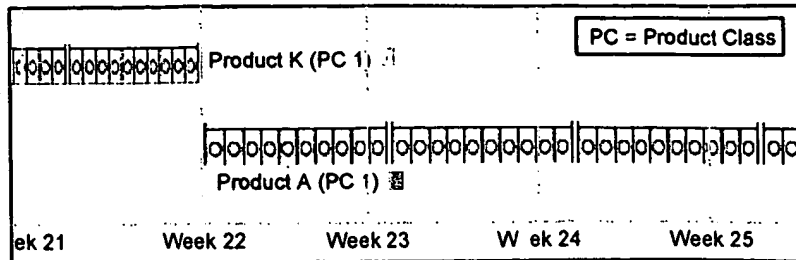
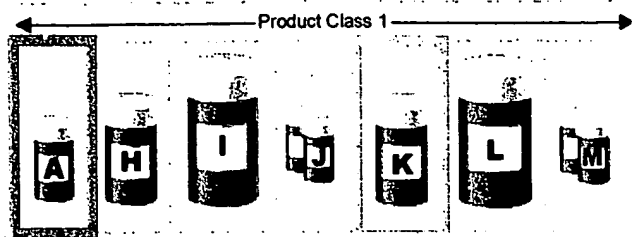


1048

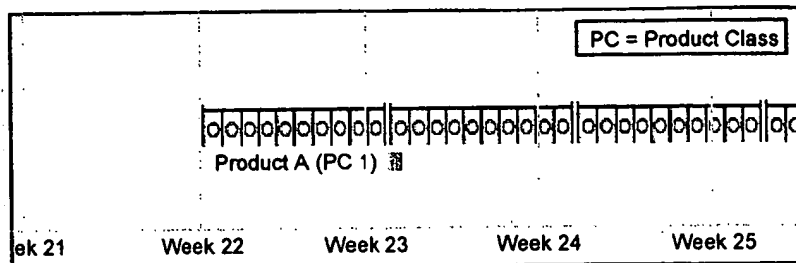
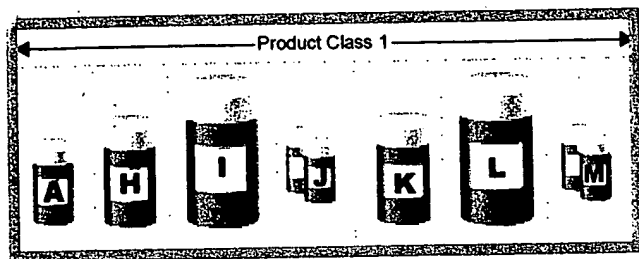


1050

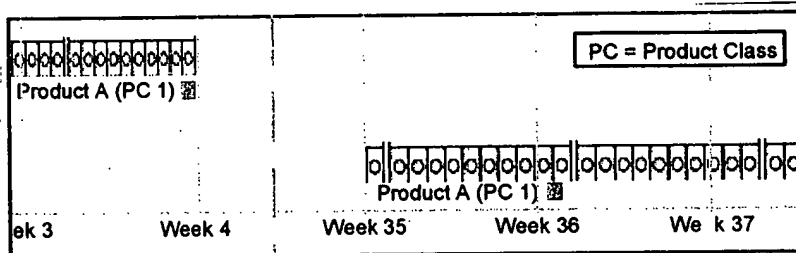
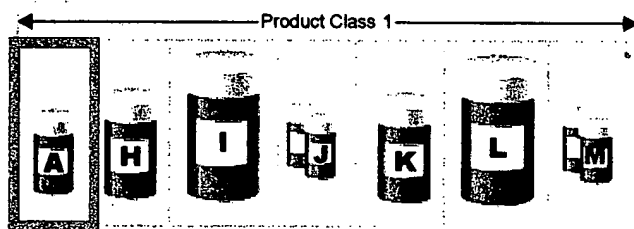
FIG. 10c cont.



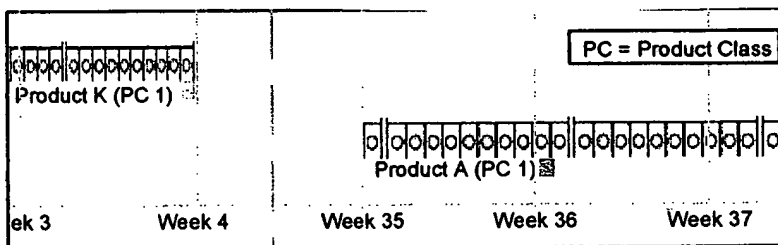
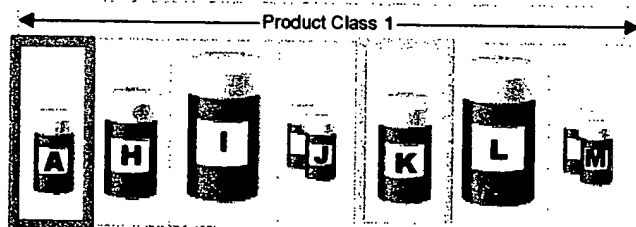
1052



1054



1056



1058

FIG. 10d

512

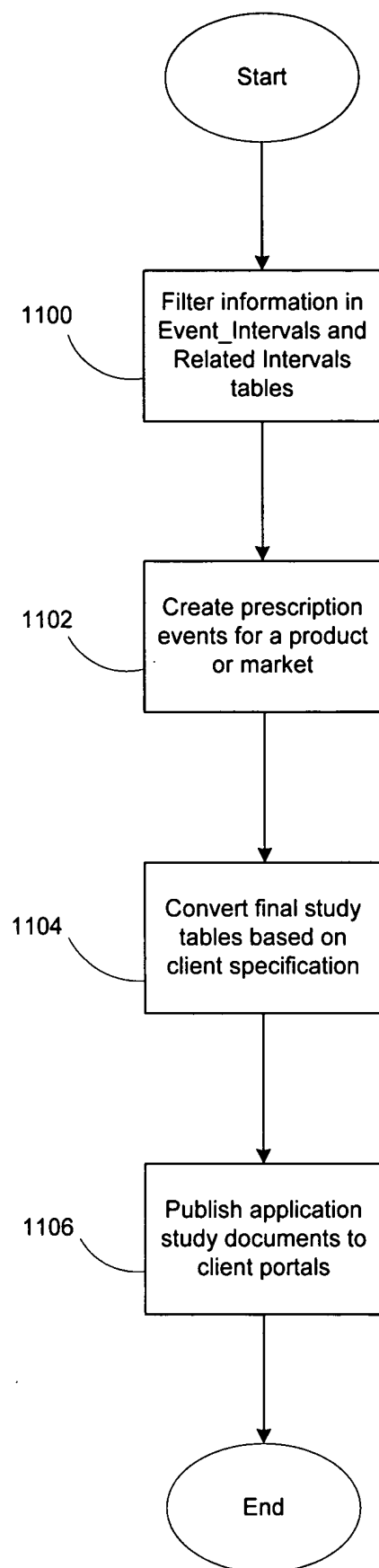


FIG. 11

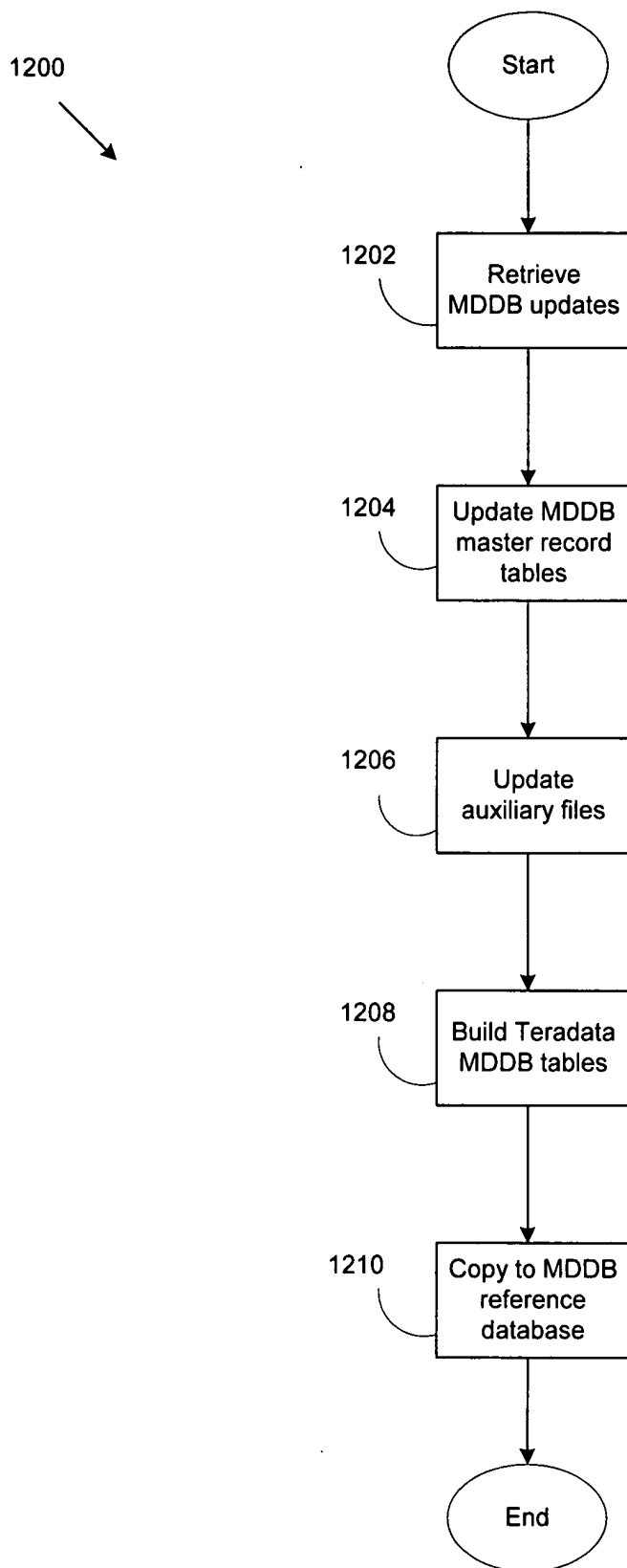


FIG. 12

T radata MSA G graphy tabl

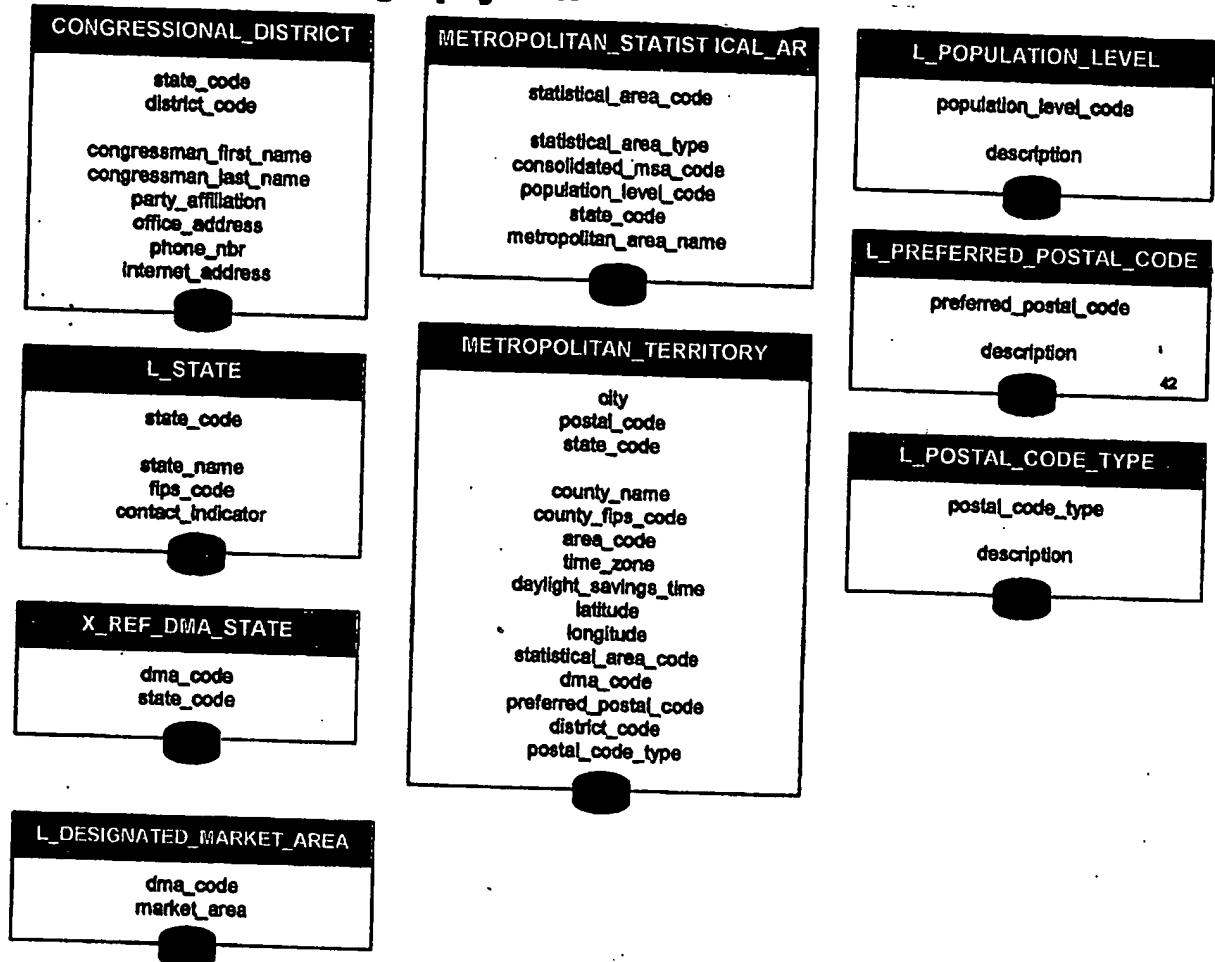


FIG. 13

ScripMaxIQ Intelligence for Targeted Action					
Client Market Log					
Client Market: View All Markets					
Refresh					
	ID	Name	Type	Date	Description
Update Cancel	260	Antipsychotics	TA	04-22-2003 10:25:55 AM	Summarization - Therapy .
Edit	258	Multiple Sclerosis	SC	04-17-2003 10:58:38 AM	Summarization - Single Class
Edit	238	Schering Plough Antihistamines	SC	04-17-2003 01:49:31 AM	Summarization - Single Class
Edit	102	ARB Combinations (Single Class)	SC	04-09-2003 08:30:00 PM	Manually
Edit	101	ARB (Single Class)	SC	04-09-2003 06:00:00 PM	Manually
Edit	100	Antihypertensive	TA	04-09-2003 05:31:00 PM	Manually
Edit	139	HMG CoA Reductase Inhibitors (Single Class)	SC	04-03-2003 04:00:00 PM	Manually
Edit	88	Glaucoma (Therapy Area)	TA	04-03-2003 02:00:00 PM	Manually
Edit	39	Hyperlipidemia (Therapy Area)	TA	04-03-2003 12:30:00 PM	Manually
Edit	52	Proton Pump Inhibitors	SC	03-12-2003 10:34:22 AM	All products from Class ID 482700. Market Definition from MDD8.
Edit	51	Osteoporosis	SC	03-10-2003 10:43:00 AM	All Products from Classes: Classids 300420, 300430, 300440, 300450, 300530. All merged together on ClassID 3004. All market definitions from MDD8.
Edit	49	HMG CoA Reductase	SC	03-08-2003 11:00:00 AM	Classids 394000 and 394099 from teradata merged into class id 3940 (HMGCoA Reductase Inhibitors and HMG CoA Reductase Inhibitors Combination). All market

FIG. 14

1500

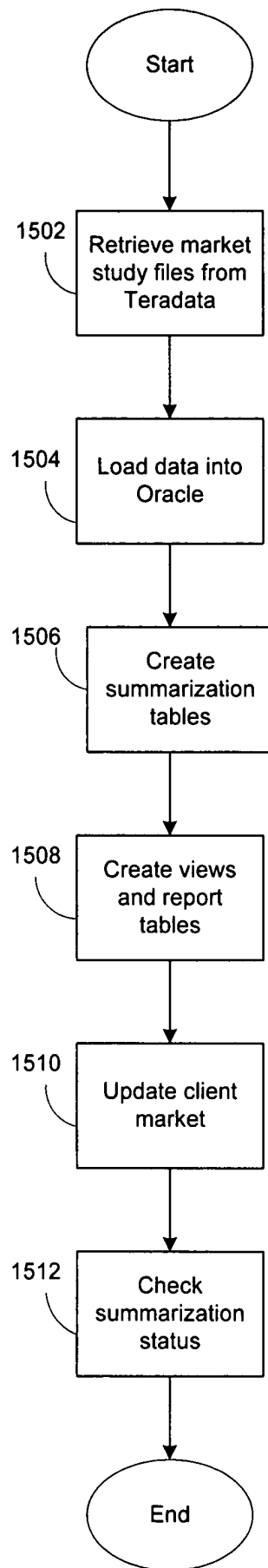


FIG. 15

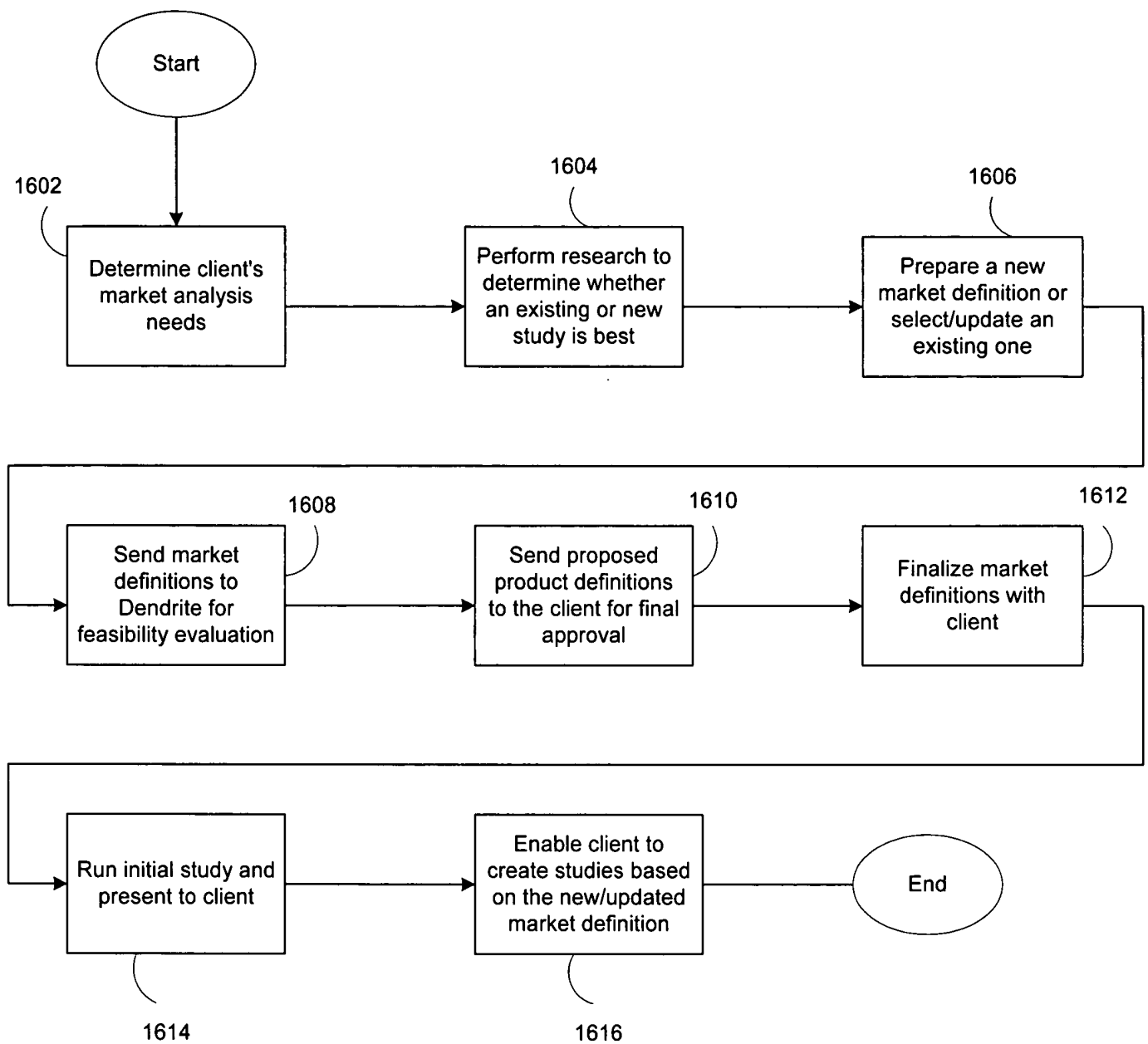


FIG. 16

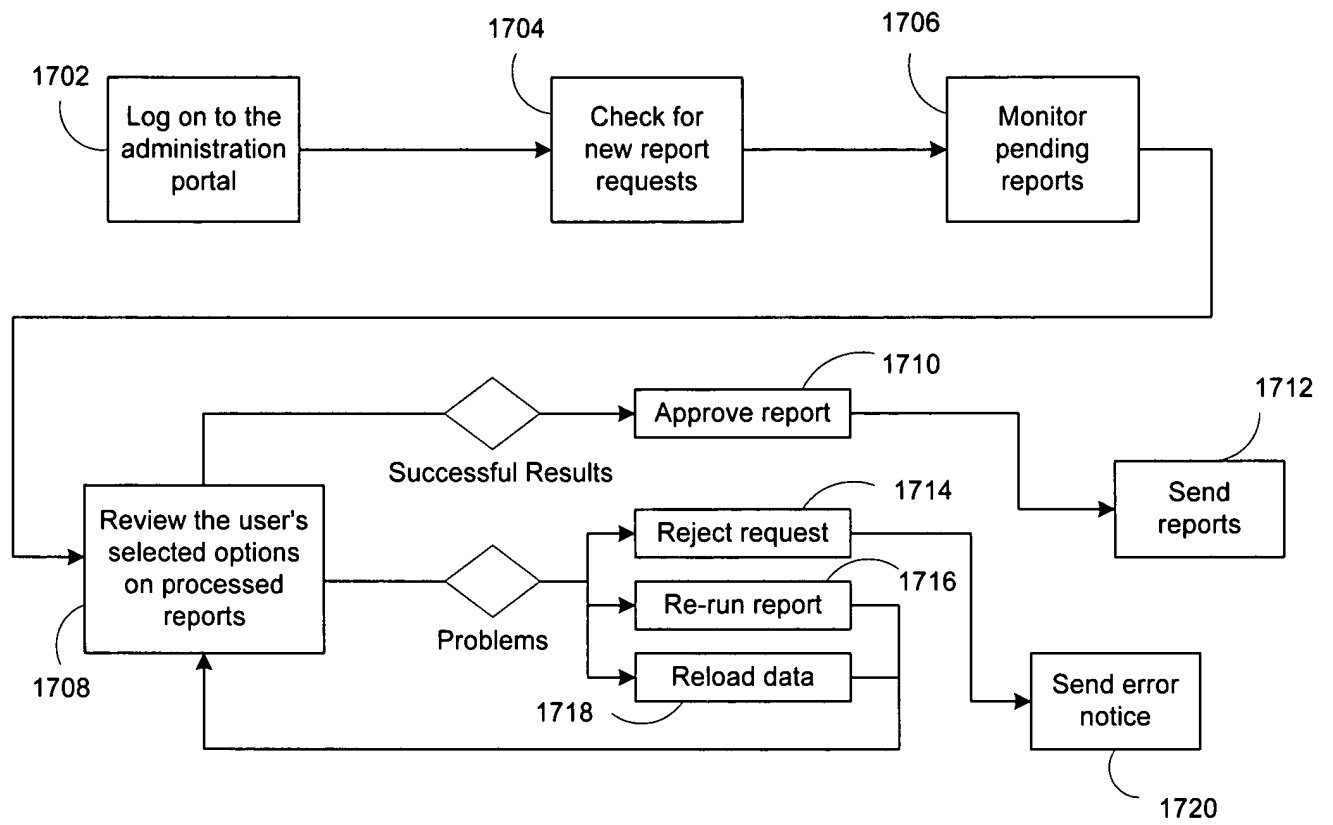


FIG. 17

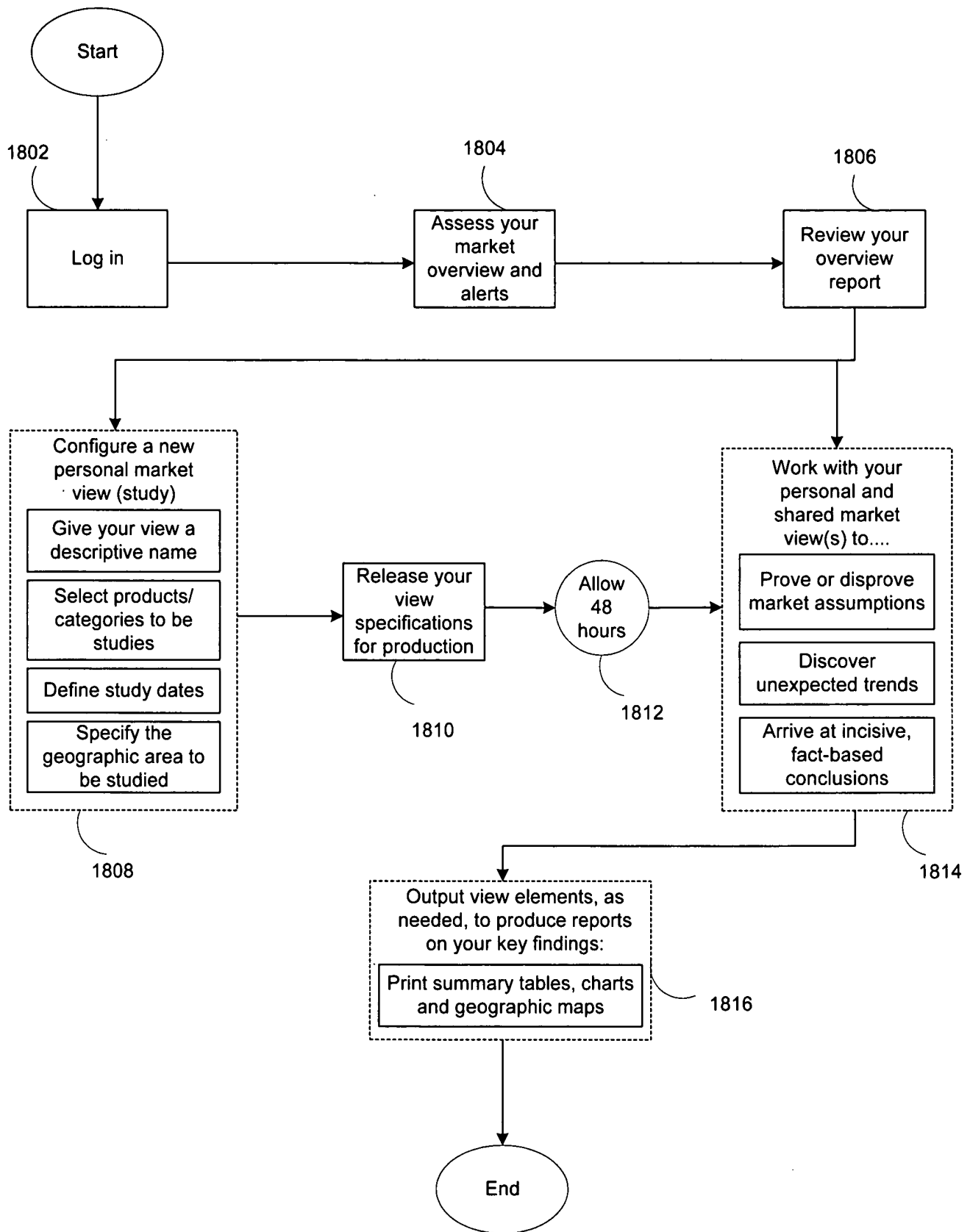


Fig. 18

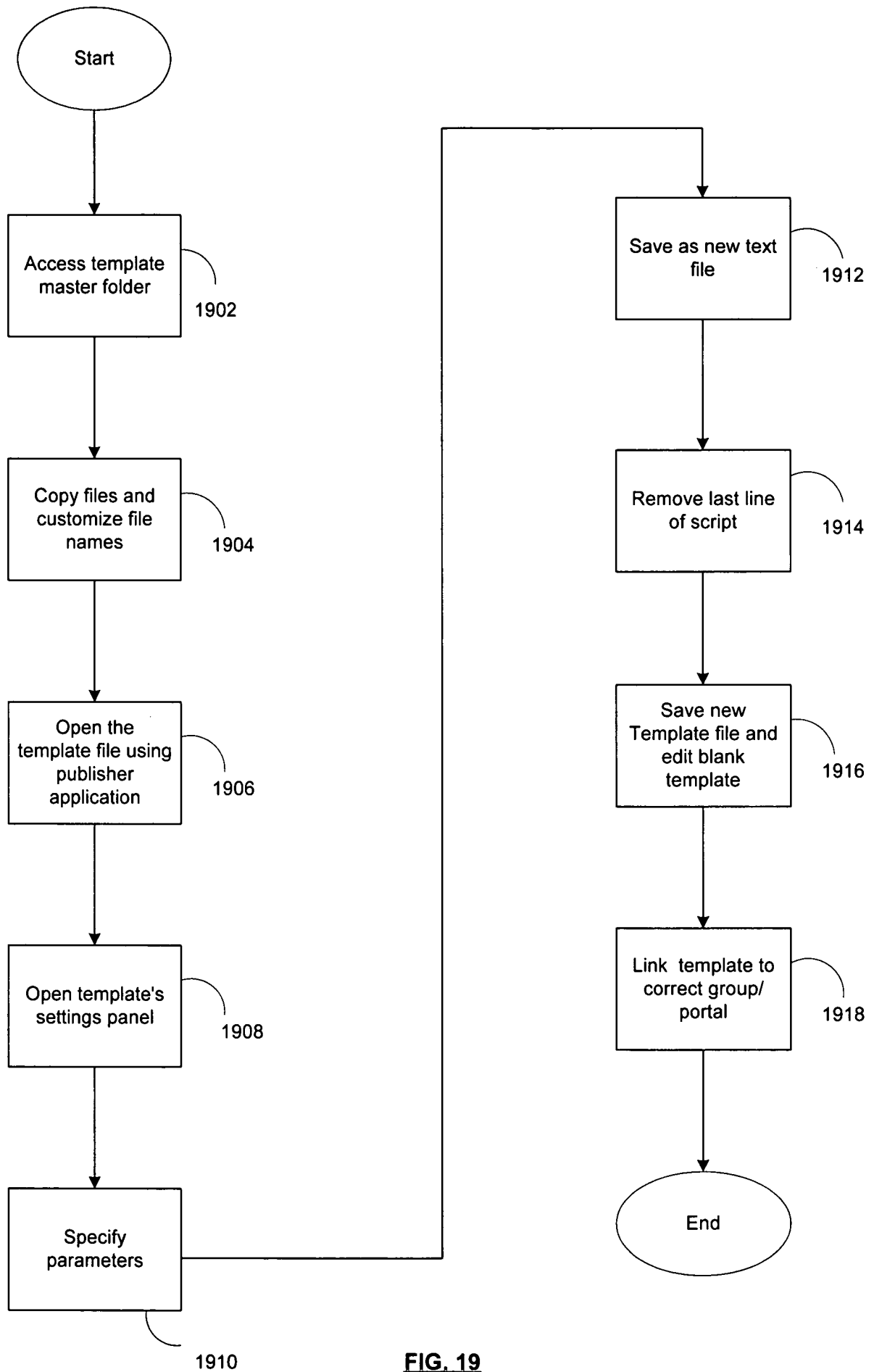


FIG. 19

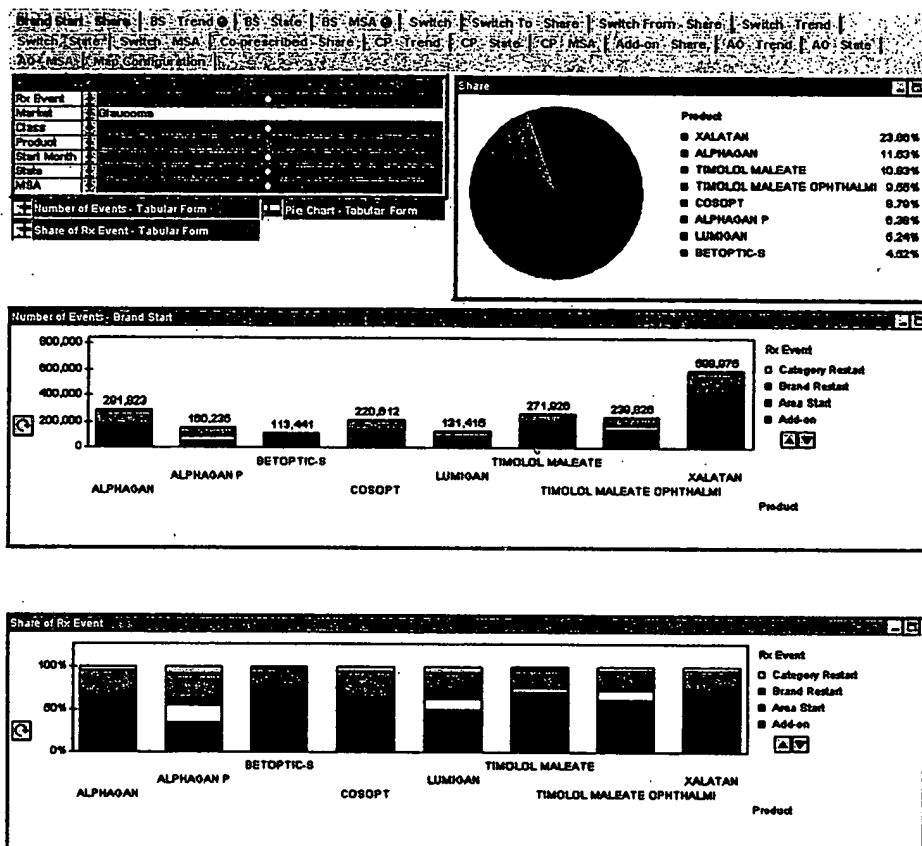


FIG. 20b

Brand Start Share ☐ Brand Trend ☐ MS MSA ☐ Switch From Share ☐ Switch Trend ☐
 Switch State ☐ Switch MSA ☐ Switch Trend ☐ GP MSA ☐ GP Trend ☐ AO State ☐ AO Trend ☐

Rx Event Class ☐ Product ☐ Start Month ☐
 State MSA ☐ Number of Events - Brand Start - Tabular Form ☐ Share - Tabular Form ☐

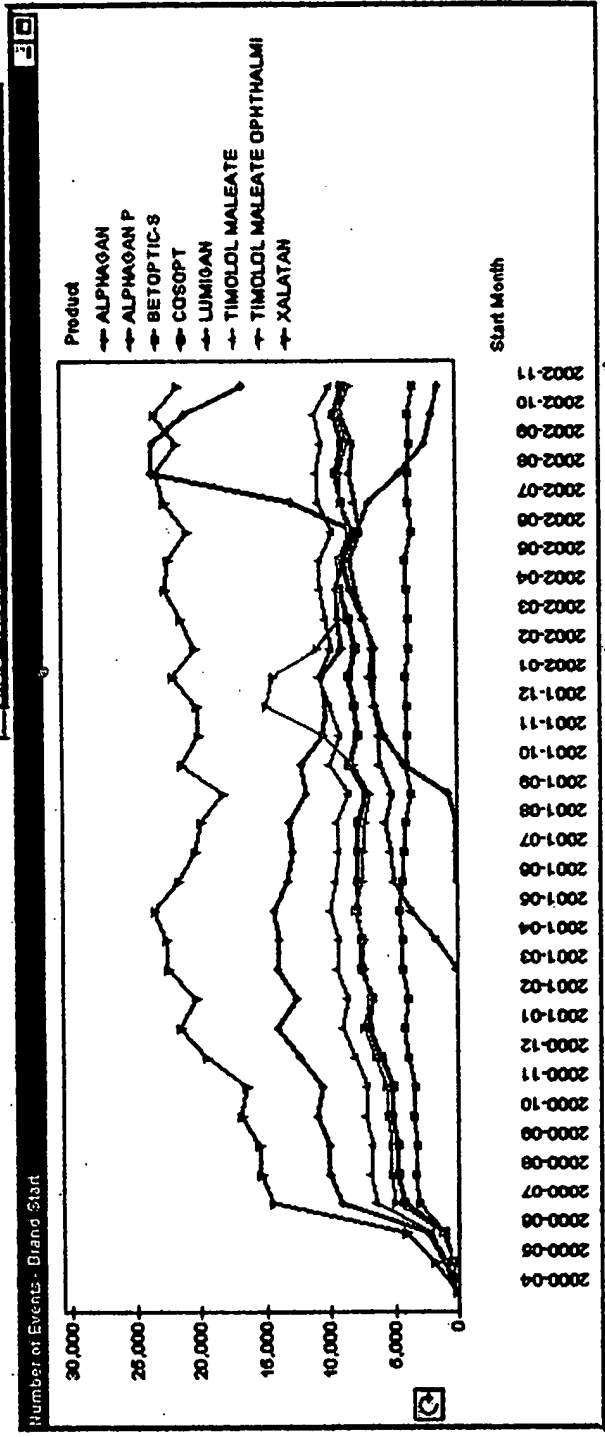


FIG. 20C

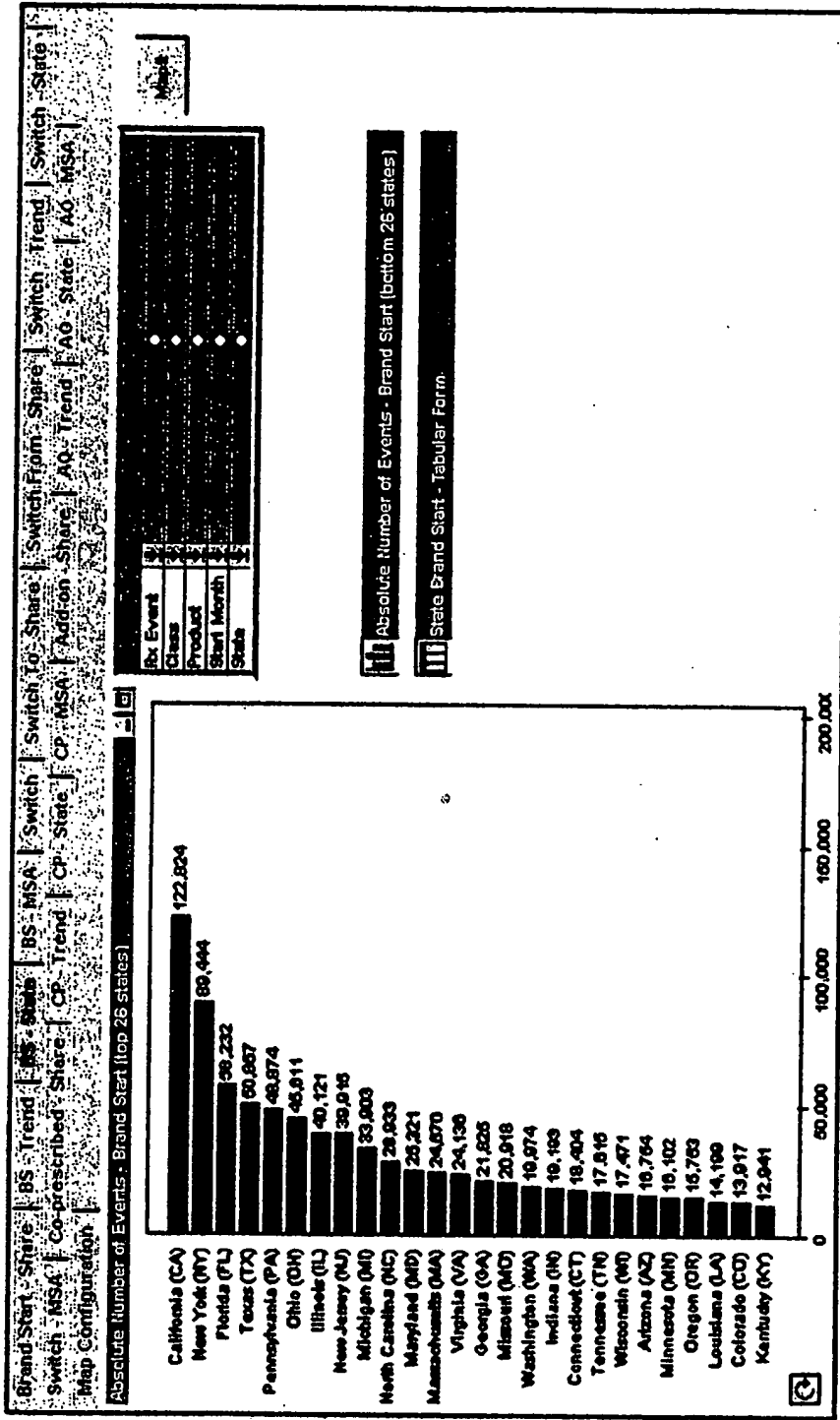


FIG. 20d

Brand Start - Share - BS - Trend - BS - State - BS - MSA - Switch - Switch To - State - Switch From - Share - Switch - Trend - Switch - State - Switch - MSA - Co-prescribed - Share - CP - Trend - CP - State - CP - MSA - Add-on - Share - AO - Trend - AO - State - AO - MSA - Map Configuration												
Number of MSA Events - Brand Start												
MSA	Absolute		Year Total Population									
Total	2,028,263											
Events with No Matching MSAs	1,308,151											
New York, NY PMSA	40,883				4,387.83							
Los Angeles-Long Beach, CA PMSA	28,881				3,117.87							
Chicago, IL PMSA	25,828				3,122.06							
Philadelphia, PA-NJ PMSA	23,012				4,511.33							
Washington, DC-MD-VA-WY PMSA	16,154				3,281.23							
Orange County, CA PMSA	14,517				6,100.33							
Boston, MA-NH PMSA	13,183				3,869.68							
Detroit, MI PMSA	13,128				2,866.27							
Baltimore, MD PMSA	11,758				4,506.57							
Cleveland-Lorain-Elyria, OH PMSA	11,510				5,113.58							
Massachusetts, MA PMSA	11,198				4,088.21							
Houston, TX PMSA	10,757				2,577.25							
Atlanta, GA PMSA	9,857				2,337.01							

Map												
Rx Event	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Class	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Product	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Start Month	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
State	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
CMSA	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MSA	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

Other Values on MSA Events - Brand Start

Other Values on MSA Events - Brand Start

FIG. 20e

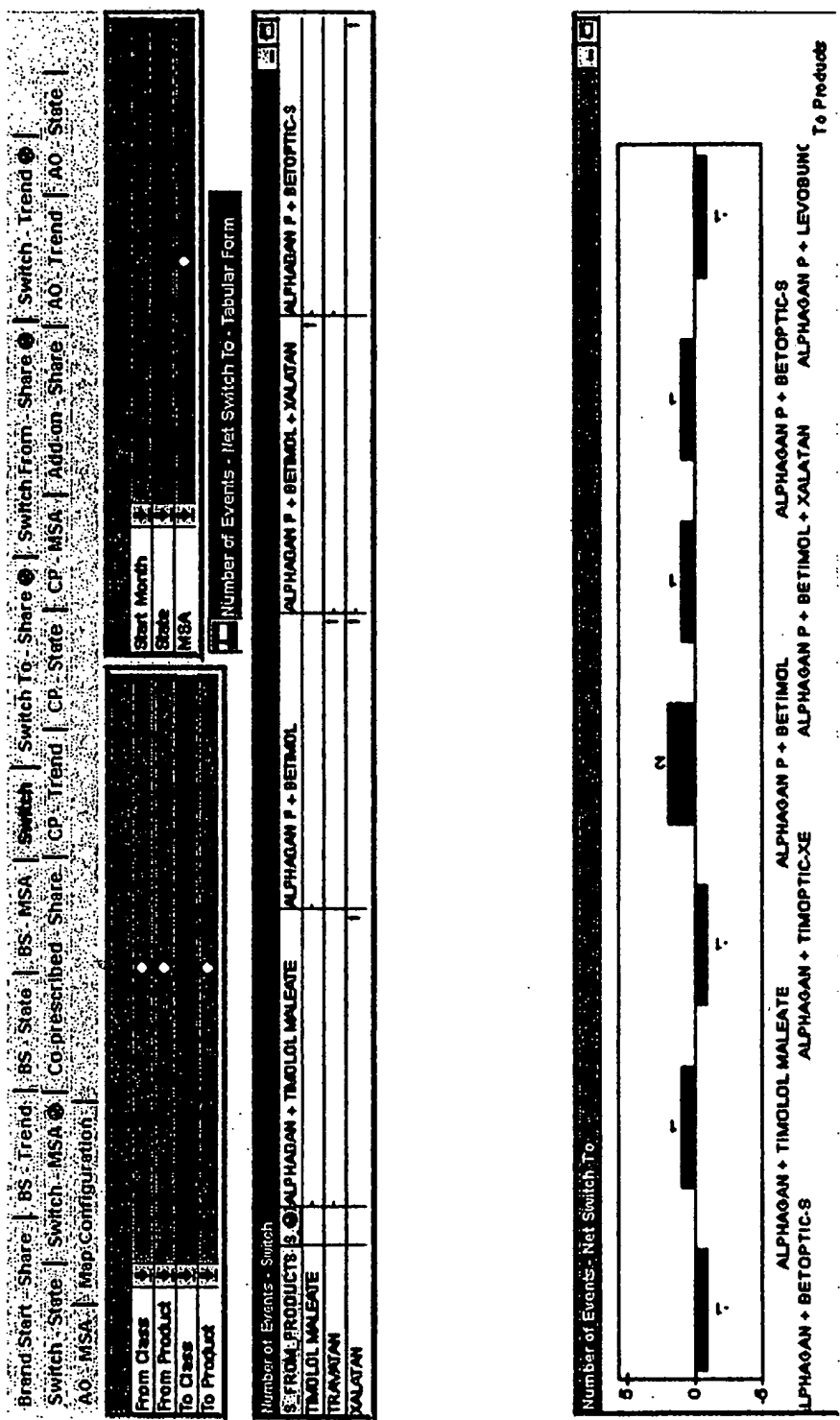


FIG. 20f

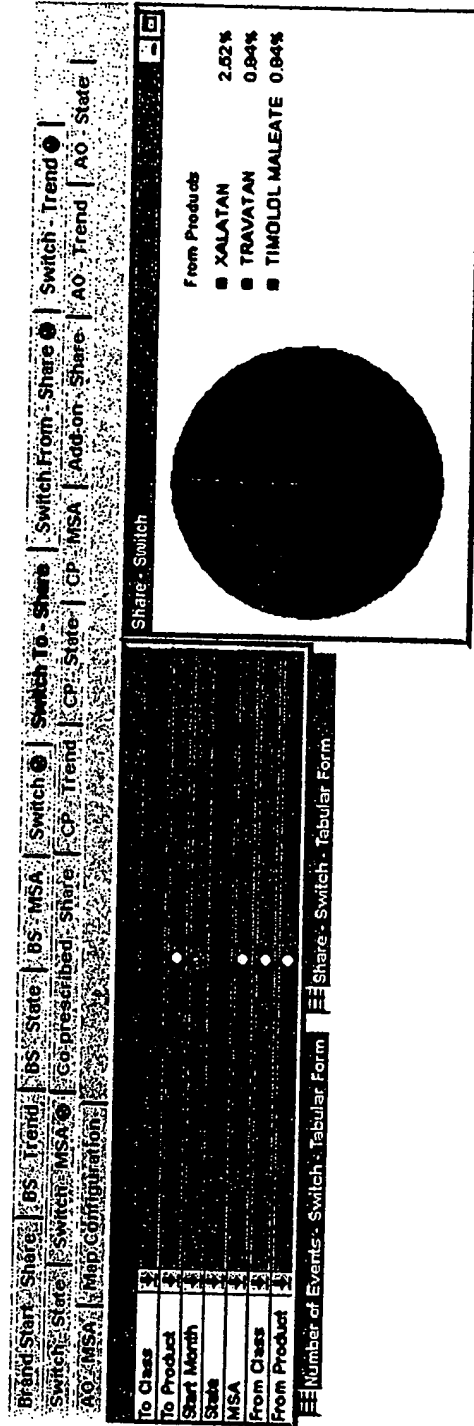


FIG. 20g

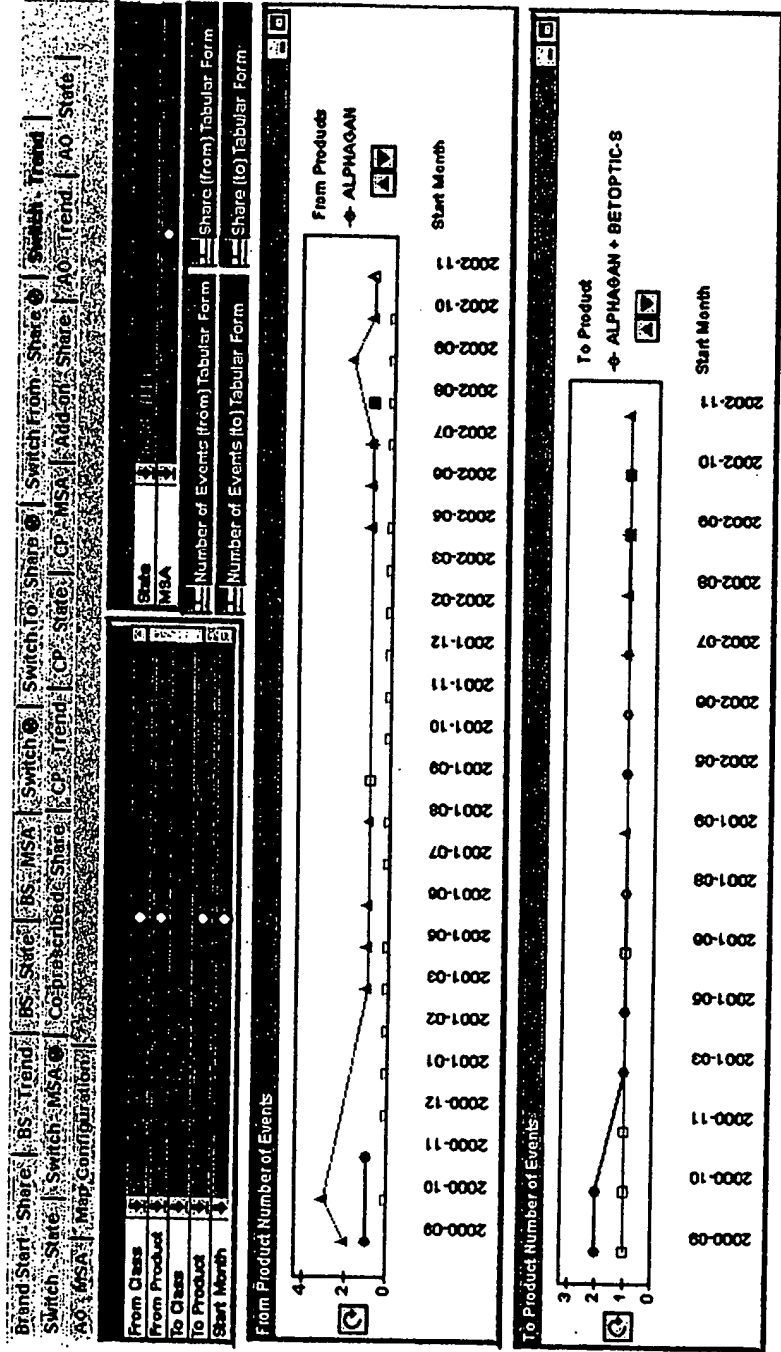


FIG. 20h

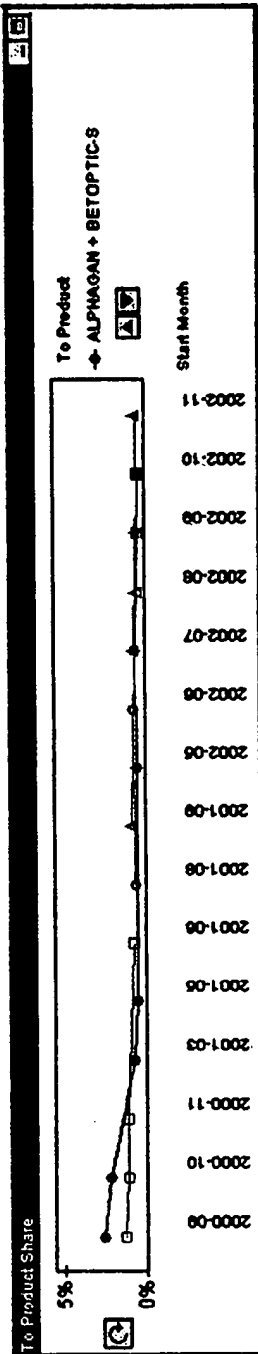
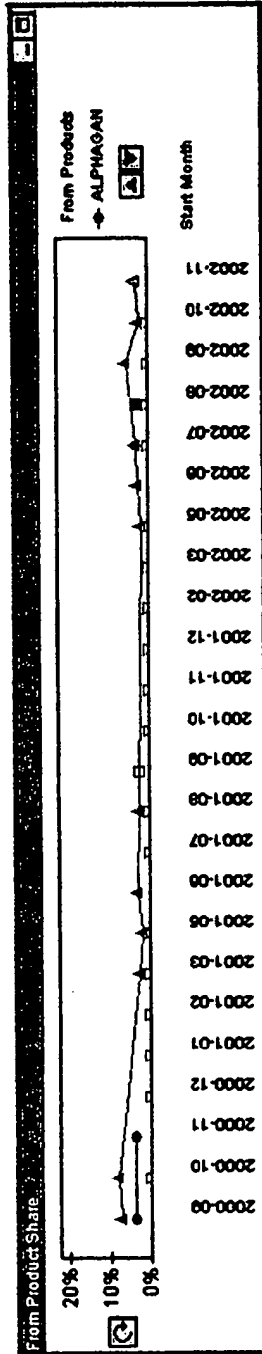


FIG. 20i

Brand Start - Share | BS - Trend | BS - State | BS - MSA | Switch | Switch To - Share | Switch From - Share | Switch - Trend | Switch - State |
 Switch - MSA | Co-prescribed - Share | CP - Trend | CP - State | CP - MSA | Add-on - Share | AO - Trend | AO - State | AO - MSA |
 Map Configuration

Start Month

State

MSA

Class

Product

Related Class

Related Product

Share - Tabular Form

Share - Co-prescribed

Selected Alpha Advertising Agents

Related Products

XALATAN 34.15%

COSOPT 15.31%

TIMOLOL MALEATE 7.48%

COSOPT + XALATAN 7.37%

BETOPTIC-S 4.83%

TIMOLOL MALEATE OPHTH 4.79%

TIMOPTIC-XE 2.83%

TIMOLOL MALEATE + XALA 2.59%

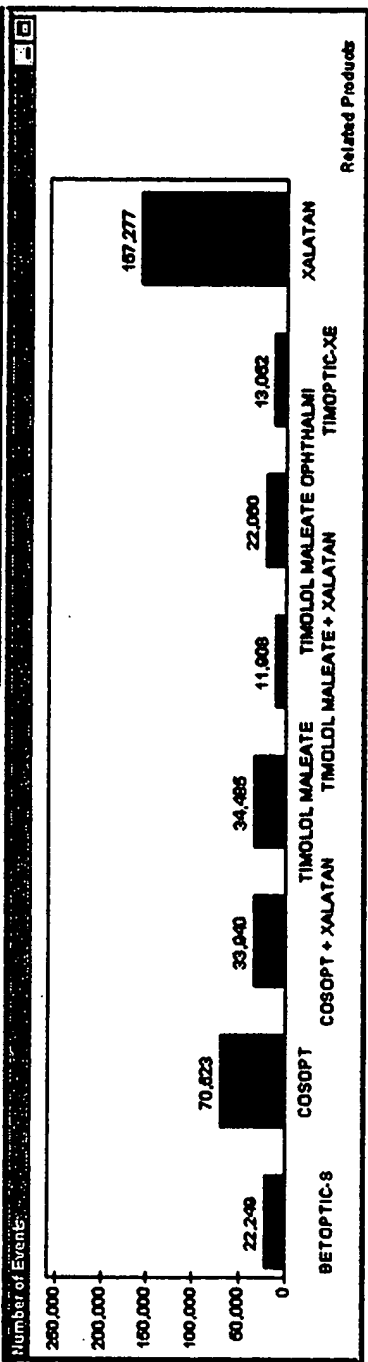


FIG. 20j

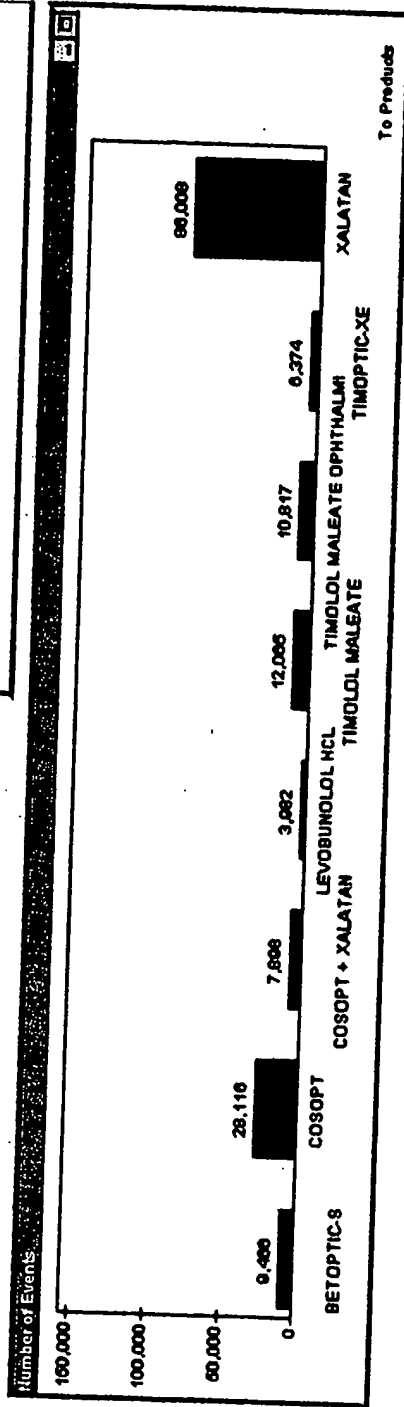
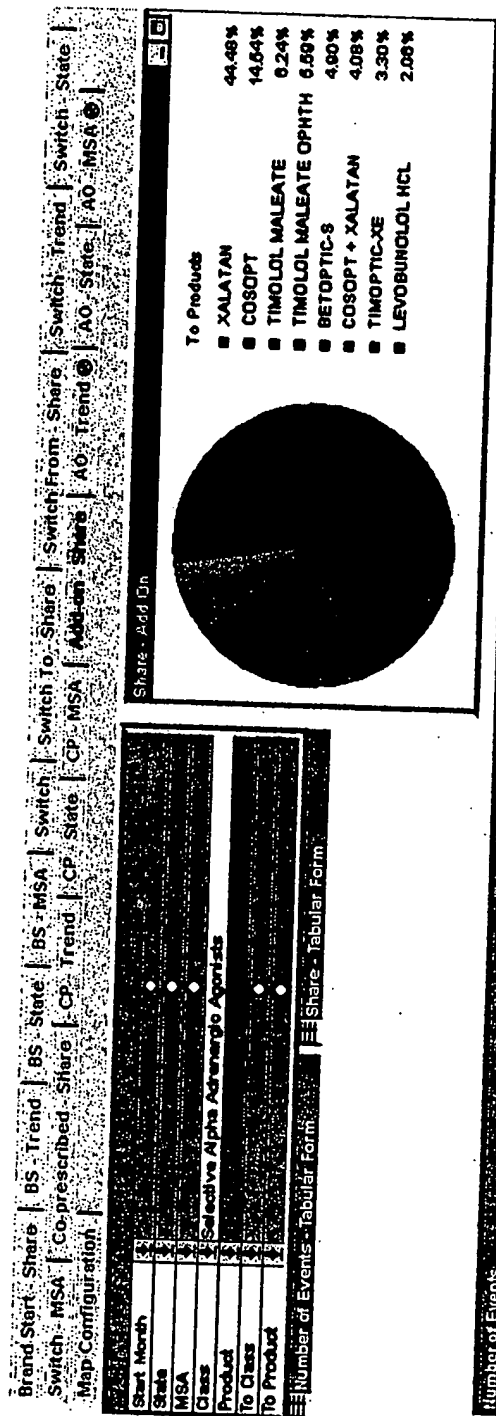


FIG. 20k

Brand Start Share | BS Trend | BS State | BS MSA | Switch To - Share | Switch From - Share | Switch Trend | Switch State |
 Switch MSA | Co-prescribed Share | CP Trend | CP State | CP MSA | Add-on - Share | AO Trend | AO State | AO MSA |
 Map Configuration

Layer Configuration		
Visibility	Behavior	Change
Automatic		
Water	Automatic	Change
County	Automatic	Change
City	Automatic	Change
US Route	Automatic	Change
Major Route	Automatic	Change
Highway	Automatic	Change
Road	Automatic	Change
State Boundary	Automatic	Change
MSA Boundary	Automatic	Change
Zip Boundary	Automatic	Change

Color Scheme: Red
 Change To Green

Map Size (height X width): 640 X 760
 700 X 1000 | 640 X 760 | 300 X 600 | 200 X 200

Plotting Calculations
 Multiplier used in the per capita rates: 1000000
 Value Type
 Absolute Number of Events
 Number of Events per Male Population
 Number of Events per Female Population
 Number of Events per Under 14 Population
 Number of Events per Over 65 Population

State Population Values
 MSA Population Values

FIG. 20L

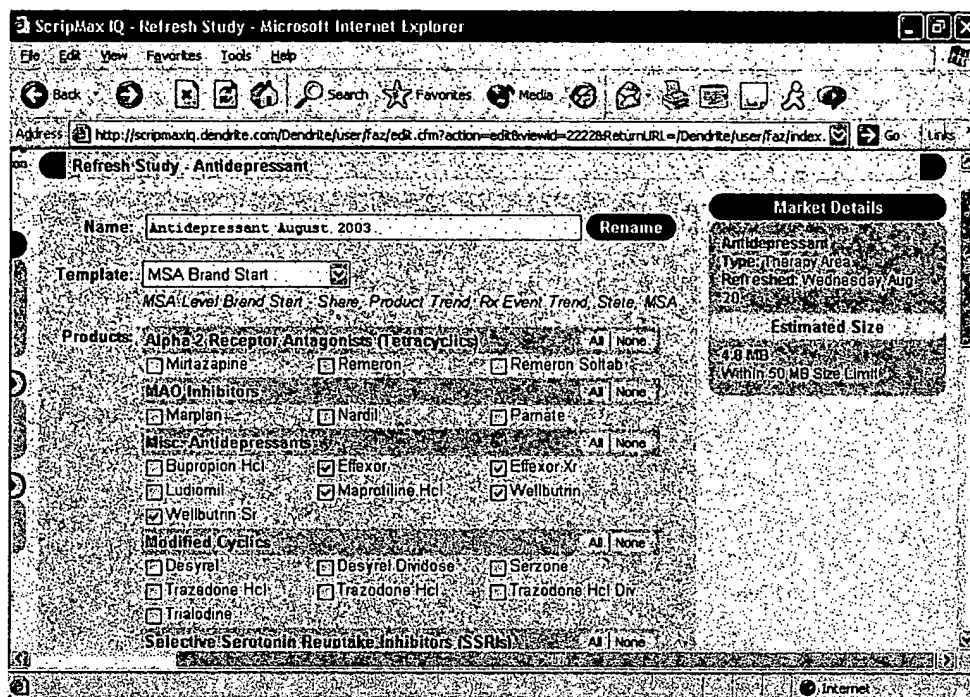


FIG. 21

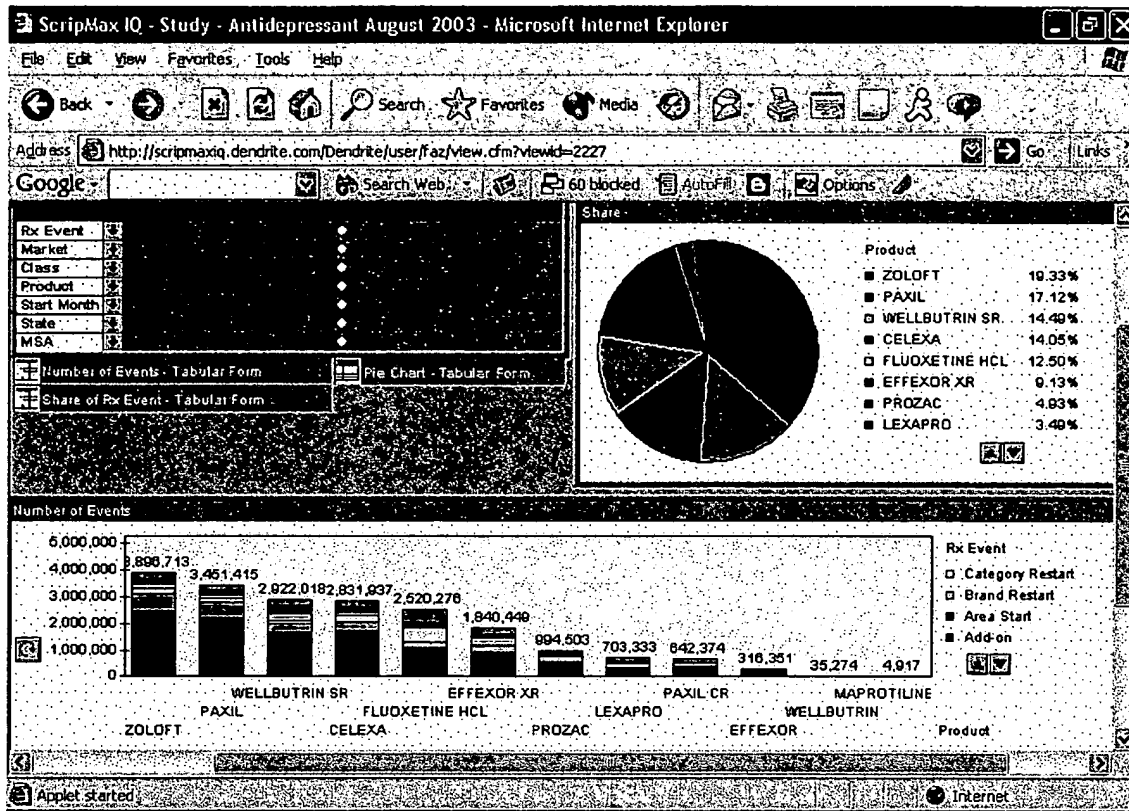


FIG. 22

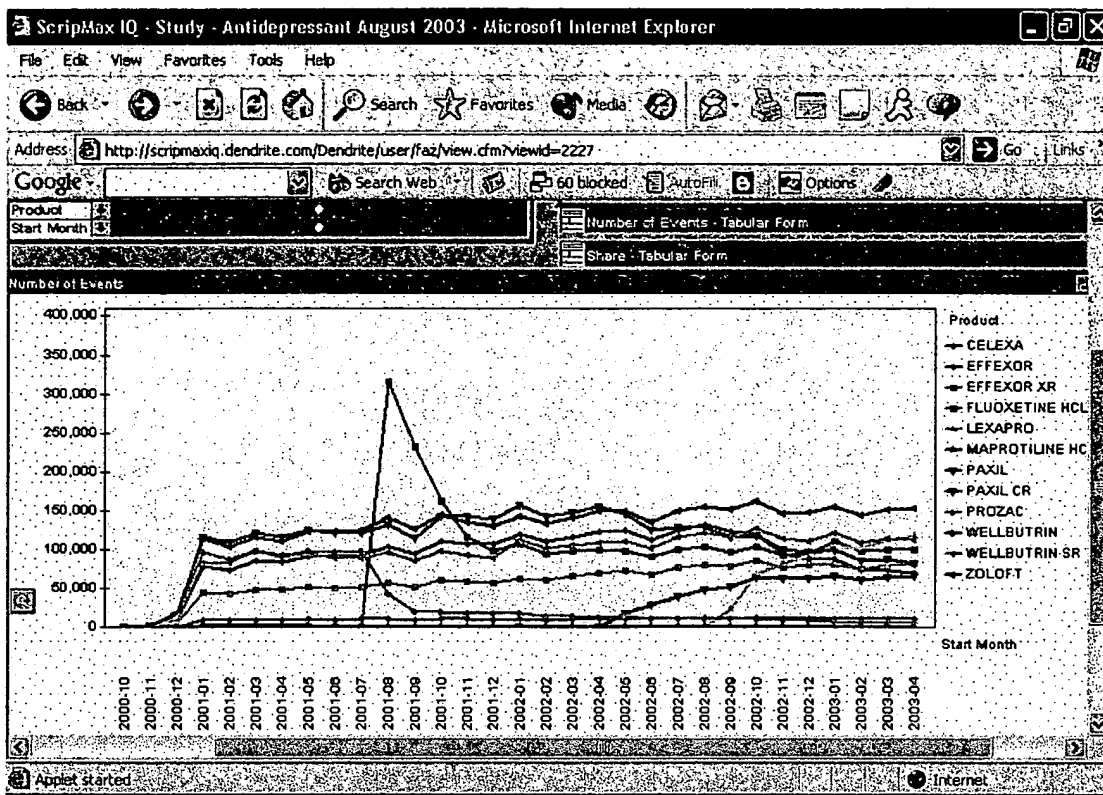


FIG. 23

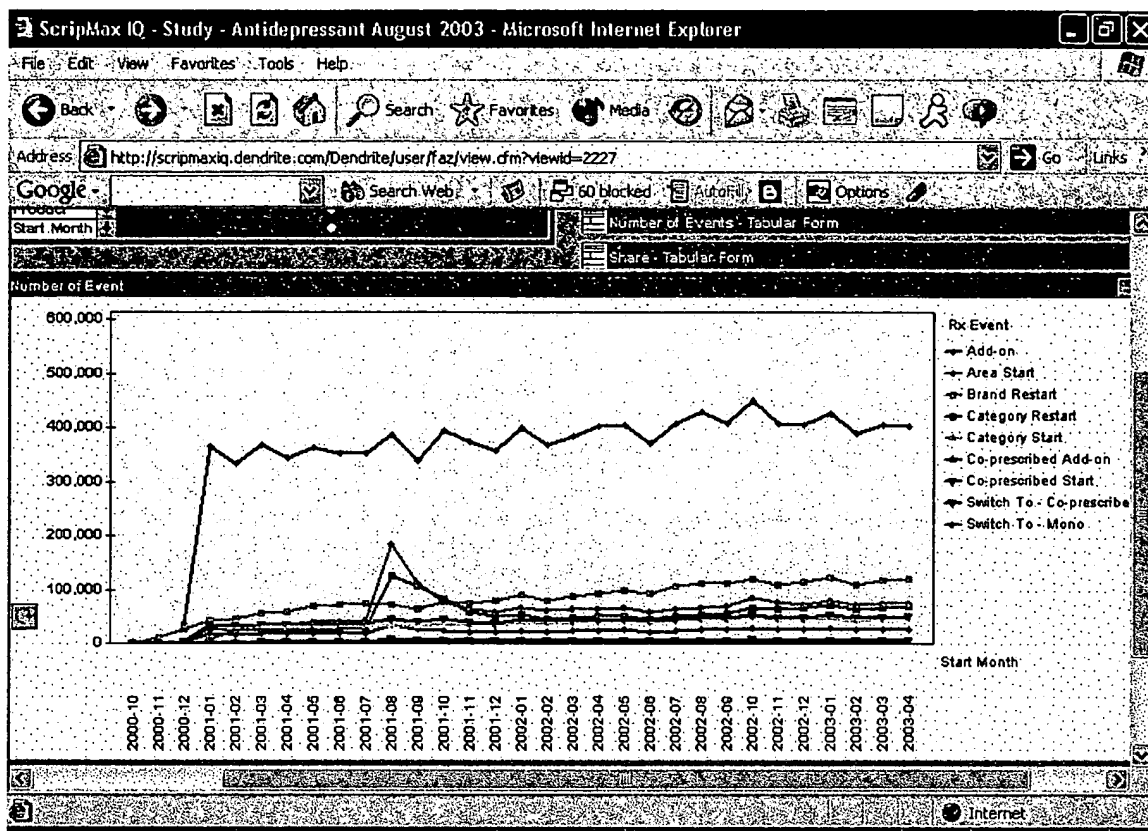


FIG. 24

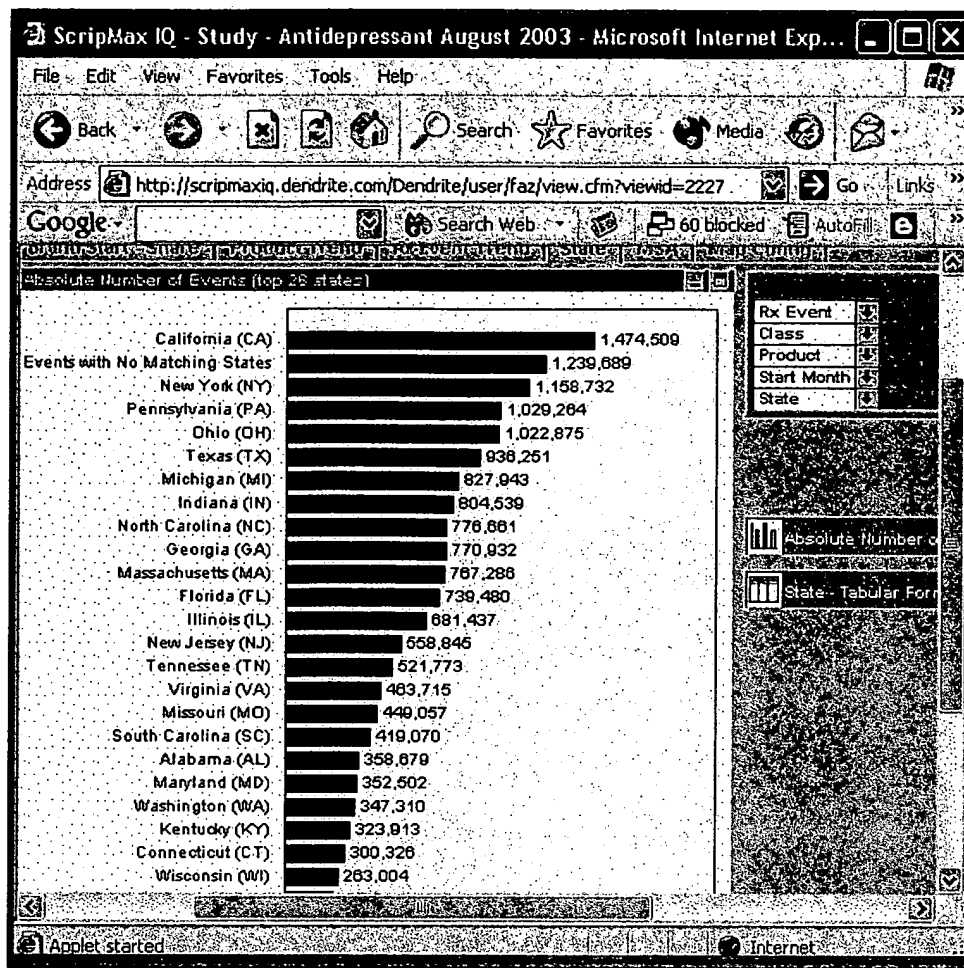


FIG. 25